Effects of Psychoeducation on the knowledge of caregivers of people with Schizophrenia

Dissertation submitted to The Tamil Nadu Dr.MGR Medical University, in part fulfilment of the requirement for MD Branch XVIII Psychiatry Final Examination to be held in May 2018

CERTIFICATE

This is to certify that the dissertation titled "Effects of Psychoeducation on the knowledge of caregivers of people with Schizophrenia" is the bonafide work of Dr. Raviteja Innamuri towards MD Psychiatry Degree Examination of Tamil Nadu, Dr. M.G.R Medical University to be conducted in May 2018.

This work has not been submitted to any university in part or full.

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CERTIFICATE

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This work has not been submitted to any university in part or full.

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DECLARATION

I hereby declare that this dissertation titled "Effects of Psychoeducation on the knowledge of caregivers of people with Schizophrenia" is a bonafide work done by me under the guidance of Dr. Deepa Braganza, Professor of Psychiatry, Christian Medical College, Vellore.

This work has not been submitted to any university in part or full.

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IRB APPROVAL LETTER

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February 23, 2017

Dr. Raviteja Innamuri,
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Sub: **Fluid Research Grant NEW PROPOSAL:**
Effects of Psychoeducation on the knowledge of caregivers of people with Schizophrenia. Dr. Raviteja Innamuri, Employment Number: 21149, PG Registrar, Department Of Psychiatry, Dr. Deepa Braganza, Professor and Head, Dr. Donae George, Assistant Professor, Mrs. Reema Samuel, Mrs. Margaret Silas, Social Worker, MHC, Mr. Karunakaran, Staff Nurse, Department Of Nursing. Department of Psychiatry. Dr. Visalakshi, Department Of Statistics.

Ref: IRB Min No: 10463 [OTHER] dated 05.01.2017

Dear Dr. Raviteja Innamuri,

I enclose the following documents:-

1. Institutional Review Board approval 2. Agreement

Could you please sign the agreement and send it to Dr. Biju George, Addl. Vice Principal (Research), so that the grant money can be released.

With best wishes,

Dr. Biju George
Secretary (Ethics Committee)
Institutional Review Board

Dr. BIJU GEORGE
MBBS., MD., DM.
SECRETARY - (ETHICS COMMITTEE)
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Cc: Dr. Deepa Braganza, Dept. of Psychiatry, CMC, Vellore

1 of 4

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Ref: IRB Min No: 10463 [OTHER] dated 05.01.2017

Dear Dr. Raviteja Innamuri,

The Institutional Review Board (Blue, Research and Ethics Committee) of the Christian Medical College, Vellore, reviewed and discussed your project titled "Effects of Psychoeducation on the knowledge of caregivers of people with Schizophrenia" on January 05th 2017.

The Committee reviewed the following documents:

1. IRB Application format
2. Cvs of Drs. Raviteja Innamuri, Reema, Deepa, Donae, Karunakaran, Margaret, Visalakshi.
3. Informed Consent and Information Sheet
4. Tamil Translations
5. No. of documents 1 – 4.

The following Institutional Review Board (Blue, Research & Ethics Committee) members were present at the meeting held on January 05th 2017 in the BRTC Conference Room, Christian Medical College, Bagayam, Vellore 632002.

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Dr. B. J. Prashantham	MA(Counseling Psychology), MA (Theology), Dr. Min (Clinical Counselling)	Chairperson, Ethics Committee, IRB. Director, Christian Counseling Centre, Vellore	External, Social Scientist
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Dr. Rekha Pai	BSc, MSc, PhD	Associate Professor, Pathology, CMC, Vellore	Internal,Basic Medical Scientist
Rev. Joseph Devaraj	BSc, BD	Chaplaincy Department, CMC, Vellore	Internal, Social Scientist
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Ms. Grace Rebekha	M.Sc., (Biostatistics)	Lecturer, Biostatistics, CMC, Vellore	Internal, Statistician
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Dr. Vivek Mathew	MD (Gen. Med.) DM (Neuro) Dip. NB (Neuro)	Professor, Neurology, CMC, Vellore	Internal, Clinician
Dr Sneha Varkki	MBBS, DCH, DNB	Professor, Paediatrics, CMC, Vellore	Internal, Clinician
Dr. Sathish Kumar	MBBS, MD, DCH	Professor, Child Health, CMC, Vellore	Internal, Clinician

We approve the project to be conducted as presented.

Kindly provide the total number of patients enrolled in your study and the total number of withdrawals for the study entitled: "Effects of Psychoeducation on the knowledge of caregivers of people with Schizophrenia" on a monthly basis. Please send copies of this to the Research Office (research@cmcvellore.ac.in).

Fluid Grant Allocation:

A sum of 4,000/- INR (Rupees Four Thousand Only) will be granted for 12 Months.

Yours sincerely,

Dr. Biju George
Secretary (Ethics Committee)
Institutional Review Board

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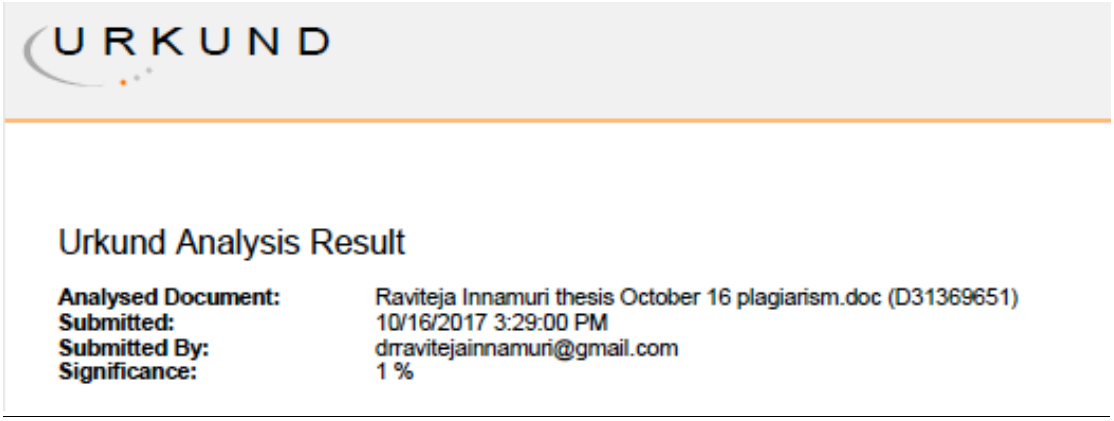
PLAGIARISM CERTIFICATE

This is to certify that this dissertation work titled "Effects of Psychoeducation on the knowledge of caregivers of people with Schizophrenia" of the candidate Dr. Raviteja Innamuri with registration number 201628254 for the award of MD in the branch of XVIII Psychiatry.

I personally verified urkund.com website for the purpose of plagiarism check. I found that the uploaded thesis file contains from introduction to conclusion pages and result shows 1 percentage of plagiarism in the dissertation.



Guide and supervisor sign with seal

ACKNOWLEDGEMENTS

Thank you is too small a word to express my gratitude to the following people;

Dr. Deepa Braganza for being my guide, role model, leader and for all the innumerable instances where she was instrumental to completing this study.

Dr. Donae George and Ms. Reema Samuel for being my co-guides, keeping me on the track and being a ready source of advice and information throughout this tedious process.

Ms. Margaret Silas and Mr. Karunakaran for their kindness to participants and for executing the group psycho education sessions smoothly and efficiently.

Ms. Visalakshi, our Statistician for her brilliance with numbers.

Dr. Arun Rachana who helped me decode several mazes during analysis.

All the heads of units and faculty who allowed me to conduct this study.

Mr. James who helped with the Tamil translation, Mr. Suresh and all the administrative staff in the department who helped me whenever I needed them.

To all my friends and family especially my life partner, Dr. Sushma Nagasuri who supported me and sacrificed as much as I did for the completion of this project.

ABSTRACT

Title of the abstract: Effects of Psychoeducation on knowledge of caregivers of people with Schizophrenia

Department: Psychiatry

Name of the candidate: Dr. Raviteja Innamuri

Degree and subject: MD, Psychiatry

Name of the guide: Dr. Deepa Braganza

Aims and Objectives:

Aim was to evaluate the effectiveness of a group psychoeducation programme in improving functional knowledge regarding schizophrenia among caregivers.

Objectives were (1) to administer Knowledge About Schizophrenia Interview (KASI) as pretest and posttest at the time of admission and discharge and evaluate the change in score for both case and control group. (2) To assess the effect of group psychoeducation when added to the standard psychoeducation program implemented in the hospital.

Methods: 50 Consecutive Tamil speaking caregivers of patients admitted with Schizophrenia at Mental Health Center, Bagayam fulfilling the inclusion criteria were administered the Knowledge About Schizophrenia Interview (KASI) within one week of admission and during the week of discharge. Cases (n=25) were caretakers who were offered the group psycho-education program every alternative week during the course of their stay in the hospital along with the standard psychoeducation at the hospital. Controls (n=25) were caregivers who received standard care alone. Wilcoxon Signed Rank Test and multivariate analysis was utilized to assess the change in KASI scores.

Results: Both groups were comparable on sociodemographic and clinical variables except in education.

Wilcoxon Signed Rank test done comparing pre-test and post-test scores showed that psychoeducation received through various sources (including psychiatrists, nurses, social workers, other patients and families) from admission until discharge produced significant change in knowledge.

On controlling for education using multivariate analysis, group psychoeducation produced a significant change in KASI scores in subsections of management, course and prognosis.

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INTRODUCTION

INTRODUCTION

Schizophrenia is a serious and life-long mental disorder that affects 1% of the population worldwide(1). Schizophrenia affects all cultures and socioeconomic groups across the world. With the introduction of antipsychotic medication in the 1950s, deinstitutionalization followed in 1955, adding greater responsibility of care and burden on the caregivers of patients with schizophrenia.

Knowledge of schizophrenia among the caregivers of schizophrenia is known to directly and indirectly influence the various outcomes of treatment(2). It influences the treatment adherence, supervision of medication and compliance, regular follow-ups, explanatory models, belief systems, expressed emotions, financial and social support offered, stigma related to mental illness, as well as acceptance in the society and rehabilitation of the individual(3)(4). Functional knowledge is defined as knowledge that has high functional value which has direct relationship in either assisting or hindering the patient's recovery. Functional knowledge of caregivers about schizophrenia as an illness not only helps the patients but also help families to cope better. Despite these benefits, caregivers often lack the knowledge required to assist patients in the treatment process.

Despite several advances in the field of medicine, good psychoeducation remains as an effective tool designed to improve functional knowledge about illness(5).

Psycho education may be defined as the education of a person with psychiatric disorder and their caregivers in subject areas that serve the goals of treatment and rehabilitation. Psychoeducation may be done on a one-to-one basis or in groups. It may involve presentations, videos, role-plays or pamphlets. However, the objectives in both the settings remain to improve knowledge, thereby bring change in attitude and thereafter engage in effective behaviour change that would in turn affect the variable treatment outcomes(6).

Group psychoeducation involving patients, caregivers and families has been emphasized as an important component of treatment strategy for schizophrenia, bipolar disorder, major depression, and other disorders(3). Several studies have been conducted across different cultures to assess the effectiveness of group psychoeducation programs in changing the knowledge and treatment outcomes. Though many of these studies report positive outcomes in terms of better treatment adherence, decreased expressed emotions; there is a dearth of similar studies in Indian settings especially with respect to improvement in knowledge (7). This study was planned to address this lacunae.

REVIEW OF LITERATURE

REVIEW OF LITERATURE

1. Schizophrenia

Schizophrenia is a chronic and debilitating mental illness usually presenting as a clinical syndrome, which disrupts cognition, emotion, perception and behavior(8). WHO has identified schizophrenia as one of the top ten illnesses contributing to global burden of disease(9).

1A. Epidemiology

It affects nearly 1% of the population (1)(10) and is known to affect all groups and cultures across the world involving both sexes almost equally.

1B. Aetiology

Though several hypotheses including biological, environmental, neuroimmunovirological, neuroanatomical, birth and pregnancy related complications and most importantly biochemical have been generated, the validity of the illness with respect to etiopathogenesis is still not known(11).

1C. Clinical features and Diagnosis:

The pathognomonic signs that have been listed in the International Classification Of Diseases and Related Health Problems(12)- Mental and Behavioral Disorders (ICD 10, 1992) for diagnosis include:

a Thought echo, thought insertion or withdrawal, and thought broadcasting;

b Delusions of control, influence, or passivity, clearly referred to body or limb movements or specific thoughts, actions, or sensations; delusional perception;

c Hallucinatory voices giving a running commentary on the patient's behavior, or discussing the patient among themselves, or other types of hallucinatory voices coming from some part of the body;

d Persistent delusions of other kinds that are culturally inappropriate and completely impossible, such as religious or political identity, or superhuman powers and abilities (e.g. being able to control the weather, or being in communication with aliens from another world);

e Persistent hallucinations in any modality, when accompanied either by fleeting or half-formed delusions without clear affective content, or by persistent over-valued ideas, or when occurring every day for weeks or months on end;

f Breaks or interpolations in the train of thought, resulting in incoherence or irrelevant speech, or neologisms;

g Catatonic behavior, such as excitement, posturing, or waxy flexibility, negativism, mute, and stupor;

h "Negative" symptoms such as marked apathy, paucity of speech, and blunting or incongruity of emotional responses, usually resulting in social withdrawal and lowering of social performance; it must be clear that these are not due to depression or to neuroleptic medication;

i A significant and consistent change in the overall quality of some aspects of personal behavior, manifest as loss of interest, aimlessness, idleness, a self-absorbed attitude, and social withdrawal.

The requirement for a diagnosis of schizophrenia is a minimum of one very clear symptom belonging to any one of the groups listed as (a) to (d), or at least two of the groups from (e) to (h), should have been present for a minimum period of 1 month.

The course of schizophrenia is usually chronic and deteriorating and requires constant care in most cases.

1D. Management

The treatment options include both pharmacological with the use of antipsychotic medication and non- pharmacological (psychosocial) strategies(13).

Though several controlled clinical trials have conclusively shown that psychosocial interventions are not an alternative to pharmacological interventions, their effects on over all treatment including improvement in treatment adherence and improved socio- occupational functioning have been documented. Studies have also shown benefits with respect to reduced hospitalization and relapse rates when adequate psycho education and family therapy are incorporated into the management(14). Therefore, several organizations such as Sangath have been showing increasing interest in community based health care(15). However this interest has not been uniformly reciprocated among all psychiatric centres. It must be noted that the benefits of psychosocial interventions especially in the field of psychiatry are far reaching considering the cost- benefit implications.

2. Schizophrenia and caregivers

2A. Shifts in responsibility- historical perspectives

Treatment of schizophrenia saw several breakthroughs in the last 100 years especially with the introduction of antipsychotic medication in the 1950 (16). With the advent of deinstitutionalization in 1955, caregivers have increasingly assumed greater responsibility for the care of their mentally ill relatives (17) also adding to their burden. Also, family burden in turn affects clinical outcomes(18).

Families usually assume the responsibility as primary caregivers in most settings. Schizophrenia Patient Outcome Research Team (PORT)(19) supporting this statement has found that 83% of clients have families living in close vicinity, more than 80% have regular contacts and 40-65% live with one or more family members.

Attempts were made to identify factors affecting the care giving process. Knowledge and attitudes of caregivers emerged as key factors influencing the care giving process leading to an emphasis on family interventions in the treatment of schizophrenia(20).

Family as a key resource in the care of patients with mental illness has been identified especially in Indian context with a tradition of interdependence and a scarcity of mental health professionals(20).

2B. Knowledge of schizophrenia among caregivers

Knowledge of caregivers about schizophrenia as an illness not only helps the patients but also help families to cope better. Despite these benefits, caregivers often lack the knowledge required to assist patients in the treatment process(21).

i) Sources of knowledge

Though the sources of knowledge of mental illnesses for patients and their caregivers range from media (newspapers, television, radio, internet), friends and family, medical professionals, religious activists etcetera, the additional sources for in-patients and their caregivers include their treating physicians, nurses, social workers, peer-peer group exchange of information and information/ fact sheets provided during the course of their stay.

ii) Studies on Indian Population

There is a dearth of studies assessing the knowledge of schizophrenia in general population but however, in a study on 50 caregivers of patients with

schizophrenia conducted in Western Maharashtra(21) as much as 30% of the caregivers reported having no prior knowledge of schizophrenia. However, 18% of the study population were illiterate and 40% received primary education alone.

iii) Studies on other country populations

Contradictory to common understanding that better education and access to resources improve knowledge, studies done even in the developed world show that the knowledge of schizophrenia is poor among the general population.

A study done in Greece showed poor knowledge and stigmatizing attitudes towards people with schizophrenia(22).

A study done in Japan revealed a section of Japanese population(23) who believe that mental illness is a product of weak personality and individuals can recover from it. Therefore, majority prefer to avoided close relationship with such individuals.

A study done in Australia(24) which recruited 2031 general public, 872 general practitioners, 1128 psychiatrists and 454 psychologists to show that most had inadequate knowledge and predominant negative attitudes to mental illness.

Attitudes and need for knowledge also varied with the priorities of the caregivers which varied with gender(21), profession(25) and priorities.

The study also stated that while male caregivers prioritized risk factors, female caregivers focussed on overall knowledge (importance given to symptomatology, recovery and caregiver support)

iv) Developing versus Developed nations

Better prognosis and outcomes of schizophrenia in developing nations has been accepted as an axiom despite studies documenting poor knowledge of schizophrenia among caregivers in these nations. Though this axiom has been derived from the landmarks of psychiatric epidemiology- World Health Organization (WHO): the International Pilot Study of Schizophrenia, the Determinants of Outcome of Severe Mental Disorder (DOSMeD), and the International Study of Schizophrenia (ISoS); a recent review study done(26) begs to reconsider these claims and questions the sampling methods utilized, assessment of study outcomes, great variation among results from different centres and generalizability of these conclusions.

3. Influence of knowledge on attitudes and practices among caregivers

Studies conducted in developed as well as developing countries show significant relationships between attitudes and burden of caregivers. Improved functional knowledge lead to more positive attitudes(24)(25)(27).

4. Knowledge of schizophrenia among caregivers and prognosis

Individuals suffering with severe mental illness such as schizophrenia often have poor insight into their illness which translates to poor treatment adherence, frequent relapses and poor prognosis. Since they are dependent on their caregivers for support, knowledge of schizophrenia among caregivers takes greater importance. Functional knowledge of schizophrenia among the caregivers of schizophrenia is known to directly and indirectly influence the various outcomes of treatment (4)(19)(28). It influences the explanatory models, belief systems, supervision of medication and compliance, regular follow- ups, expressed emotion among relatives, financial and social support offered stigma and acceptance in the society and rehabilitation of the individual.

The relation between expressed emotion and schizophrenia has been studied since a long time. It refers to the caregivers' attitudes to the patient and is considered a major stressor and has been strongly linked to recurrence of mental illness(29). Expressed emotions consist of criticism, hostility and over involvement.

Families of patients suffering with schizophrenia report high expressed emotion with rates of relapse higher (48%) than in families with low EE (6%).

Therefore, this knowledge directly translates to the treatment outcomes(30) and number of relapses(31)(32).

5. Tools for measurement of knowledge of schizophrenia

There are several scales to measure the knowledge of schizophrenia among the caregivers, which include the following:

i) Knowledge Questionnaire - KQ (Pitschel-Walz 1997): The maximum score of this questionnaire is 70. High score indicates better outcome.

ii) Schizophrenia Knowledge Questionnaire - SKQ (Wallace 1985): High score indicates a better outcome.

iii) The Scale to Assess Unawareness of Mental Disorder - SAUMD (Amador 1994): There are a total of 20 questions in SAUMD. Score range 1 to 5 points; a high score indicates a poor understanding and attribution.

iv) Understanding of Medication Questionnaire - UMQ (Macpherson 1996): UMQ measures knowledge of antipsychotic treatment. Fourteen stem questions generate eight subscale knowledge scores, relating to factual information, treatment practice, treatment rationale, effects of stopping treatment, side effects, precautions, tardive dyskinesia and risk/ benefit evaluation. The UMQ is an extended version of scales measuring knowledge of illness and treatment and knowledge of tardive dyskinesia. Total knowledge score is 35. Knowledge scoring 0 = no understanding and 35 = full understanding.

v) Knowledge About Schizophrenia Questionnaire - KASQ (Ascher-Svanum 1999): This is a 23-item multiple-choice questionnaire, which covers the illness-related topics. The maximum score is 23, indicating a high level of knowledge about the illness.

***vi) Knowledge About Schizophrenia Interview* – KASI** (33) has been shown to be an effective tool in the measurement of the functional knowledge about schizophrenia (Barrowclough 1987). The KASI questionnaire has been validated in Tamil by Schizophrenia Research Foundation [SCARF] India.

KASI is a clinician assisted self-report questionnaire containing questions divided into 6 sections of diagnosis (4 questions), symptomatology (5 questions), etiology (4 questions), medication (7 questions), course and prognosis (3 questions) and management (4 questions).

6. Methods to improve knowledge of Schizophrenia

Several interventions have been designed to improve functional knowledge about illnesses among patients and their caregivers which includes psycho education(34). The term "psychoeducation" was first employed by Anderson and was used to describe a behavioural therapeutic concept consisting of 4 elements; briefing the patients and their relatives about the illness, problem solving training, communication training, and self-assertiveness training. Psychoeducation may be defined as the education of a person with psychiatric disorder or their caregivers in subject areas that serve the goals of treatment and

rehabilitation. It has been emphasized as an evidence-based practice with various beneficial health outcomes.

Psychoeducation may be done on a one-to-one basis or in groups. It can be delivered by social workers or nurses or psychiatrists. The duration of these sessions vary from study to study(35). In may involve presentations, lectures(35), videos, role-plays, pamphlets or booklets(36) and recently through online education(37). However, the objectives in all settings remain to improve knowledge, thereby bring change in attitude and thereafter engage in effective behaviour change that would favourably affect the variable treatment outcomes(38).

Psychoeducation is an evidence-based, non-pharmacological treatment strategy in the management of schizophrenia. It is being offered across several psychiatric hospitals across the world(39). Despite its efficacy and effectiveness, it is largely underused as per recent reports(39). However, though its effectiveness with regard to relapse prevention, adherence and functioning is significant, a recent metanalysis(40) shows that its effect on knowledge is significant but small.

7. Challenges in measuring efficacy of psycho education

Efficacy of psychoeducation for patients of schizophrenia is measured through better understanding about medication, treatment adherence and lesser relapse rate. Likewise, for caregivers it is assessed through caregiver knowledge, caregiver burden, caregiver coping and caregiver support.

In the Indian population, the challenges extend to addressing the diversity of the population in terms of their education, socio-cultural backgrounds, stigma, religious sentiments, suiting local needs and difficulty in follow up. While most studies have explored these factors in educated and urban caregivers, few or none have explored the same in rural communities(7).

8. Studies on group psycho education

Psychoeducation when done in groups has been referred to as group psycho education.

Since most of the psycho education has been focussed on the caregivers and relatives, family psycho education has become the alternative word or approach referred to in the series of studies done between 1970s to 1980s.

Family psychoeducation has been emphasized as an important component of treatment strategy for schizophrenia, bipolar disorder, major depression, and other disorders (3)(41).

While the initial studies were focussed on the effectiveness of family psycho education in preventing recurrence of an episode, later studies focussed on testing more specific hypotheses and especially testing of efficiency of delivery systems. These delivery systems include relatives only group, single family unit therapy and multiple family groups. However, no clear advantage of any single format have been demonstrated(42).

Several studies have been conducted to assess the effectiveness of psycho education and its influence on various outcome measures using various strategies.

A Cochrane metanalysis done (43) entitled Psychoeducation(brief) for people with serious mental illness included 20 studies and 2337 participants to compare conventional delivery of information with brief psychoeducation. Brief psychoeducation in this case was defined as 10 sessions or less. The study concluded that participants receiving psycho education were less likely to be non- complaint, relapse rates significantly lower than in the medium term but not in long term along with some studies reporting improvement in long term global state, improved mental state in short term, as well as decreased incidence of depression and anxiety.

Bauml et al., 2007(44) in a study using brief psycho education intervention suggested possible long term benefits in the 7 year follow- up study of the Psychosis Information Project Study (PIP- study). Aguglia et al.,2007(45) also replicated similar results in their 1 year follow- up study.

Successful attempts were made to replicate these findings utilizing even shorter psycho educational programs. One such example is a study done in Japan(46) with 2-4 sessions led by doctors, nurse and social worker in a span of 2 months with 2-6 participants. A study conducted in Louisiana called *Journey Of Hope*(47) recruited 462 family members and demonstrated better coping in family led intervention with improved scores from baseline, at 3 and 8 months.

A study titled a Controlled Trial of Social Intervention in the Families of Schizophrenic Patients(48) recruited 24 families and relatives of patients with schizophrenia with high risk of relapse, high expressed emotions to compare outpatient care versus psychoeducation about schizophrenia. This demonstrated a significant decrease in relapse rate and higher rate of therapeutic intervention in the experimental families.

A randomized controlled trial conducted in China(31) titled Family-Based Intervention for Schizophrenic Patients in China compared standard care vs.

family based care and demonstrated lower hospitalization, shorter duration of re-hospitalization, longer duration of employment, lower family burden especially at 12 and 18 months from baseline.

Peer support and peer-led family support also has been increasing gaining momentum especially in the developed world. With regard to short term outcomes of knowledge of illness, attitudes towards treatment are comparable to groups with professional moderators. However, long term outcomes are not yet available(49).

Studies were able to demonstrate the cost-effectiveness of psycho education as well. Mino et al., 2012(50) showed that the direct medical costs of families attending the psycho education group were significantly lower than the control group.

However, not all psycho educational programs were successful. Studies attempting to influence explanatory models did not report satisfactory results. In a study conducted on 100 patients in a tertiary care psychiatric hospital in Tamil Nadu, India to study the effectiveness of psychoeducation on explanatory models in schizophrenia couldn't demonstrate any change after 2 weeks from baseline(51).

8A. Group psychoeducation in different cultural settings

Psychoeducational programs designed to address the social and cultural diversity of the target population are not new. Several such studies were especially done in Chinese populations. Some of the many studies which have taken consideration of the cultural settings have been outlined below.

In a study conducted to evaluate the incorporation of Multi- Family Psycho education Group (MFPG) to an Assertive Community Treatment Team developed to address culturally diverse clients which included Tamil and Chinese and found that MFPG enhanced family members understanding of illness(52).

Shin et al., 2002 (53) in a study demonstrated a modified culturally relevant psycho education intervention for Korean Americans with chronic mental illness and showed improved coping skills, enhanced empowerment in dealing with crises, and a significant decrease in stigma.

Xiang M et al., 1994(54) in a controlled study with family psychoeducation as an intervention demonstrated improved compliance, improved recognition of mental disturbances, and a better family clinician partnership in the experimental group.

Chien and Wong., 2013(38) also demonstrated improvements in functioning of families and patients through a culturally sensitive psychoeducational program addressing the specific cultural and family needs conducted by a trained psychiatric nurse.

Similarly, several other adaptations of psychological programs for different cultural settings have been done with good results. An example is the Parent Child Interaction Therapy (PCIT) for Mexican American families addressing their barriers to treatment(52).

8B. Other innovative psychoeducation programs

Several indigenously designed educational models were developed with demonstrable success in different parts of the world.

A study called SPERA- S (Study on Psychoeducation Enhancing Results of Adherence in patients with Schizophrenia) conducted on 340 patients diagnosed with Schizophrenia- spectrum psychoses proved the effectiveness of the Falloon Psycho education Program in adherence to psychotherapy compared with family supportive therapy which received generic information on the disorders.

Falloon's model aimed to promote communication and develop problem solving abilities in patients and their families as well.

In recent years, several web-based psycho educational programs have come to light and increasing numbers of studies have established their effectiveness and urge their use in this era of the internet.

A study conducted on 31 patients with schizophrenia and 24 support persons also demonstrated that web-based psychoeducational intervention has good potential and has many advantages than that of standard clinic based delivery models(37).

The E-Sibling project(37) also proved the effectiveness of an online multi-component psychoeducational intervention in enhancing siblings' knowledge about psychosis and their coping capacity.

Other interesting group educational programs include the approach adopted by **Digital Green-** an international NGO who have been disseminating knowledge

on various topics in rural communities across the world through videos by the community and for the community.

8C. Studies demonstrating psychoeducation and its influence on knowledge

Few studies have specifically explored the effectiveness of psychoeducation programs in improving knowledge of schizophrenia. These studies were predominantly done on out- patients including caregivers of patients of schizophrenia.

A study done in Japan(55) compared small group with two sessions vs. large group with nine sessions vs. large group with nine sessions utilizing m- KASI to showing an increase in knowledge and better relapse prevention among small and large group (9 session).

Barrowclough et al., 1987(33) using Knowledge About Schizophrenia Interview (KASI) demonstrated an increase in functional knowledge and decreased Expressed Emotions and criticism at 1 week in relatives of patients suffering with schizophrenia following a psychoeducation program.

Hasan et al., 2014(56) recruited both patients with schizophrenia and their caregivers and through a psychoeducational intervention on knowledge levels and outcomes utilized Knowledge about Schizophrenia Questionnaire (KASQ), Positive and negative syndrome scale (PANNS) and Family burden interview schedule (FBIS) to compare outpatient clinics to 6 booklets every fortnight and demonstrated positive outcome from Baseline to immediately post-intervention and at 3 month follow up.

A study conducted in Hong Kong recruited a sample of 90 and utilized Knowledge about Schizophrenia Test (KAST) and Knowledge of Psychosis Interview (KOPI) and demonstrated that caregivers' recognition of psychosis was correlated with medication compliance and that the knowledge of patients could be correlated with that of caregivers(57).

A study done in Thailand studied the effects of psycho- educational program on knowledge and attitude of Schizophrenia on 91 caregivers and were able to demonstrate statistically significant improvement in scores following the program(27).

Studies in India

A few studies in India have been reported which were able to demonstrate psycho education as a simple, feasible and cost- effective tool for developing countries like India where resources are scarce needing utilization of non-medical personnel.

In a study entitled Family education in Schizophrenia: A comparison of two approaches(42) conducted in Schizophrenia Research Foundation (SCARF), Chennai concluded that though there was no significant change in the psychopathology of patients or the caregiver burden, significant improvement in knowledge of schizophrenia among caregivers was noticed.

A randomized controlled trail conducted in Chandigarh with 26 patients and their caregivers to compare standard out- patient care and structured psycho educational intervention consisting of monthly sessions for 9 months and demonstrated structured psycho educational intervention as a viable option with better outcomes in psychopathology, disability, caregiver- support and caregiver satisfaction. However, the results did not show a reduction in drop-out, relapse, caregiver burden or caregiver coping.

It may be noted that these studies have recruited both patients and caregivers in out-patient settings with the rationale that stable outpatients are more amenable and tend to benefit more than symptomatic in-patients. However, very few studies have been done exclusively on the caregivers with change in their knowledge as the main outcome measure.

Our study has been done on in-patient population utilizing an indigenously designed tool in our department for our population with change in knowledge as the main outcome measure. This study will address the lacunae in the current available literature and will help in understanding the various factors that influence change in knowledge among the local population.

AIMS AND OBJECTIVES

AIMS AND OBJECTIVES

Aims:

To evaluate the effectiveness of a care giver group psychoeducation programme in improving functional knowledge of schizophrenia

Objectives:

1. To administer Knowledge About Schizophrenia Interview (KASI) as pre-test and post-test at the time of admission and discharge respectively.
2. To evaluate the change in KASI score from pre- test to post- test in both cases and control group to assess the effectiveness of the group psychoeducation program.
3. To assess the effect of group psychoeducation when added to the standard psychoeducation program implemented in the hospital.
4. To understand the factors that influence the knowledge of schizophrenia among caregivers.

METHODOLOGY

METHODOLOGY

Type of study- Quasi- experimental, two group pre-test and post-test design

Study setting- Department Of Psychiatry, Mental Health Centre, Christian Medical College, Bagayam, Vellore, Tamil Nadu

This study was carried out among the caretakers accompanying in-patients admitted with a diagnosis of schizophrenia. Mental Health Centre located at Bagayam is a 122-bedded hospital that provides short-term care for patients with all types of psychiatric diagnoses from the town of Vellore and a wider rural area beyond. It also functions as a tertiary referral center for management of patients with mental and behavioral disorders from different parts of India. The hospital has a daily outpatient clinic in which 450–500 patients are seen. Adult patients attending the outpatient department are assigned under Unit 1 or 2 based on the weekday of attendance to OPD (Unit 1- Monday, Wednesday, and Friday) (Unit 2- Tuesday, Thursday, and Saturday). If deemed necessary, patients are thereafter admitted with their caregivers under the respective unit for a period of 2-6 weeks where the emphasis is on a multidisciplinary approach and collaborative care using a wide variety of pharmacological and psychological therapies. The treatment strategies of both the adult unit do not largely differ. The primary therapists being the postgraduate residents also

rotate equally in both the units during their academic term. The multidisciplinary team of doctors, nurses and occupational therapists provide psychoeducation to patients and their caretakers during the course of the stay as part of the 'standard care'. The standard care also involves regular sessions (thrice weekly) with the primary therapist and giving a schizophrenia fact sheet (in the language understandable by the patient/ caregivers).

The group psychoeducation program for schizophrenia held in unit 2 is conducted by a Tamil- speaking social worker in a separate chamber, with duration of each session ranging from 30-45 minutes, held on alternate Wednesdays. These session focus on schizophrenia with details about illness, course, prognosis, treatment options and compliance for 20-30 minutes followed by discussion and clarification of queries posed by the participants for another 10- 15minutes. Sessions are also assisted by a 31-slide PowerPoint presentation (enclosed as appendix).

For the purpose of the study, caregivers of patients admitted under unit 2, who attended the psycho- education program every alternative week as per the unit protocol were considered as cases.

Caretakers of patients admitted under unit 1 (non-attending participants) were considered as controls. Only cases attending a minimum of 1 group psychoeducation session were considered for post-test evaluation.

Caretakers from both the units were recruited over a period of 6 months.

To minimize bias, primary investigator was not involved in the psychoeducation program.

Participants:

*Sample population***-** Consecutive caregivers (25 in each group) of in- patients undergoing treatment for schizophrenia diagnosed as per *International Classification of Diseases – 10;* ICD 10; WHO, 1992) were recruited after obtaining an informed consent.

Inclusion criteria-

Caregivers who were willing to participate and provided a written consent

Caregivers of patients admitted with a diagnosis of schizophrenia

Patient relatives between the ages of 18 to 70

Tamil speaking

Minimum duration of inpatient stay for the patients being at least 2 weeks

For the cases group:

Minimum no. of sessions to be attended: 1

Exclusion criteria-

Severe language, hearing or cognitive impairment

Diagnosis of physical or major mental illness

Data Measurement:

Proforma for socio- demographic and clinical variables (enclosed as appendix):

Details regarding socio- demographic variables and clinical details were recorded as in the proforma enclosed. It contains details about the name, degree of relation, age, gender, marital status, religion, education, occupation, habitat, family type, socio-economic status, if any other family member suffered or is suffering from a psychiatric illness, if he/she ever visited a psychiatrist for personal health issues, if they had ever been a caregiver to any other patient with psychiatric illness and their sources of knowledge regarding the psychiatric illness.

Knowledge About Schizophrenia Interview - KASI (enclosed as appendix) has been shown to be an effective tool in the assessment and evaluation of the functional knowledge about schizophrenia(33). It gives importance to functional value of the reported knowledge than recall of information. It is quick, easy to administer and has been reported to be reliable with good face-validity for the relative. The KASI questionnaire has been translated into Tamil by Schizophrenia Research Foundation [SCARF], Chennai, India.

KASI is a clinician assisted self-report questionnaire containing questions divided into 6 sections of diagnosis (4 questions), symptomology (5 questions), etiology (4 questions), medication (7 questions), course and Prognosis (3 questions) and management (4 questions).

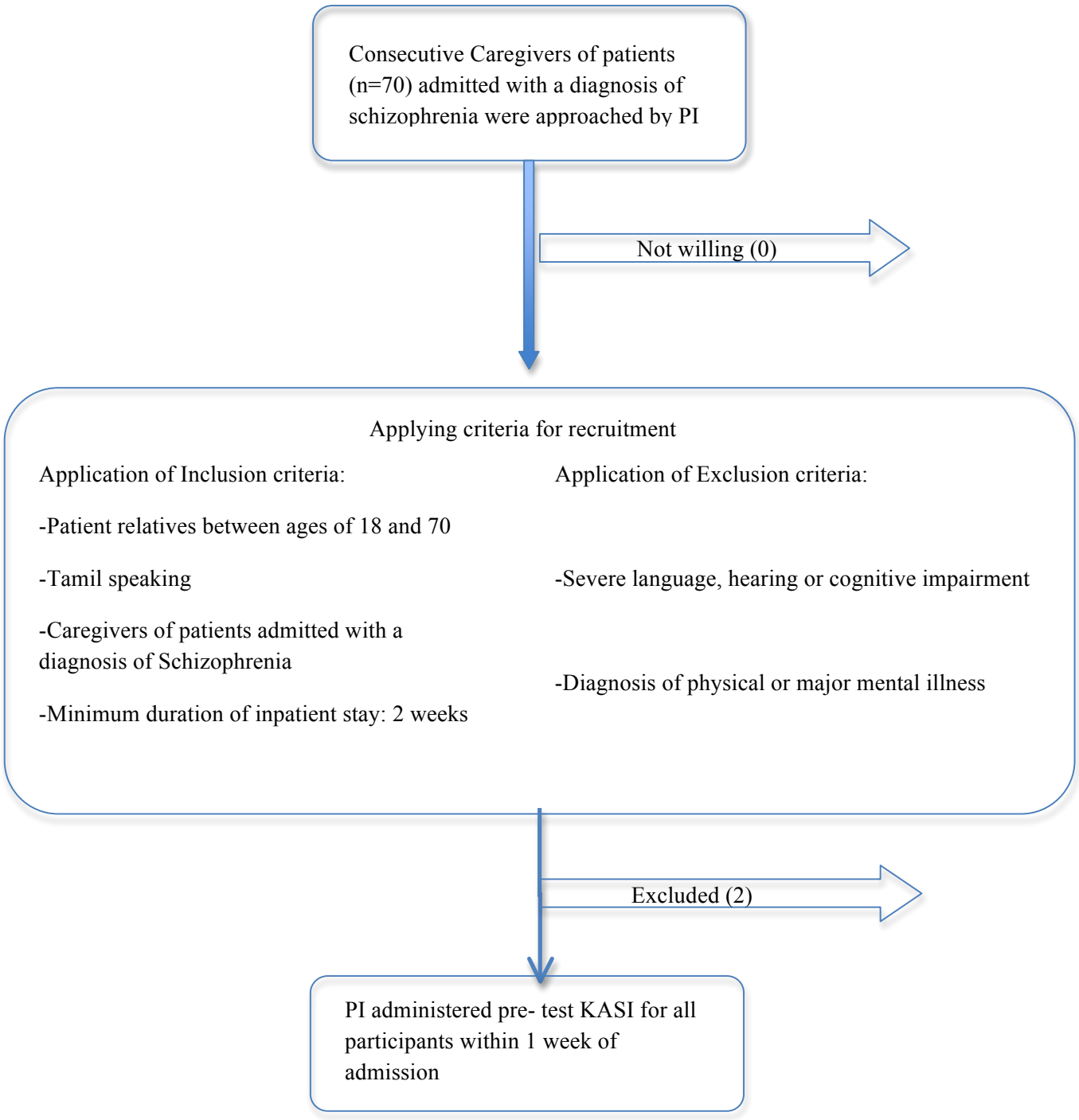
Procedure:

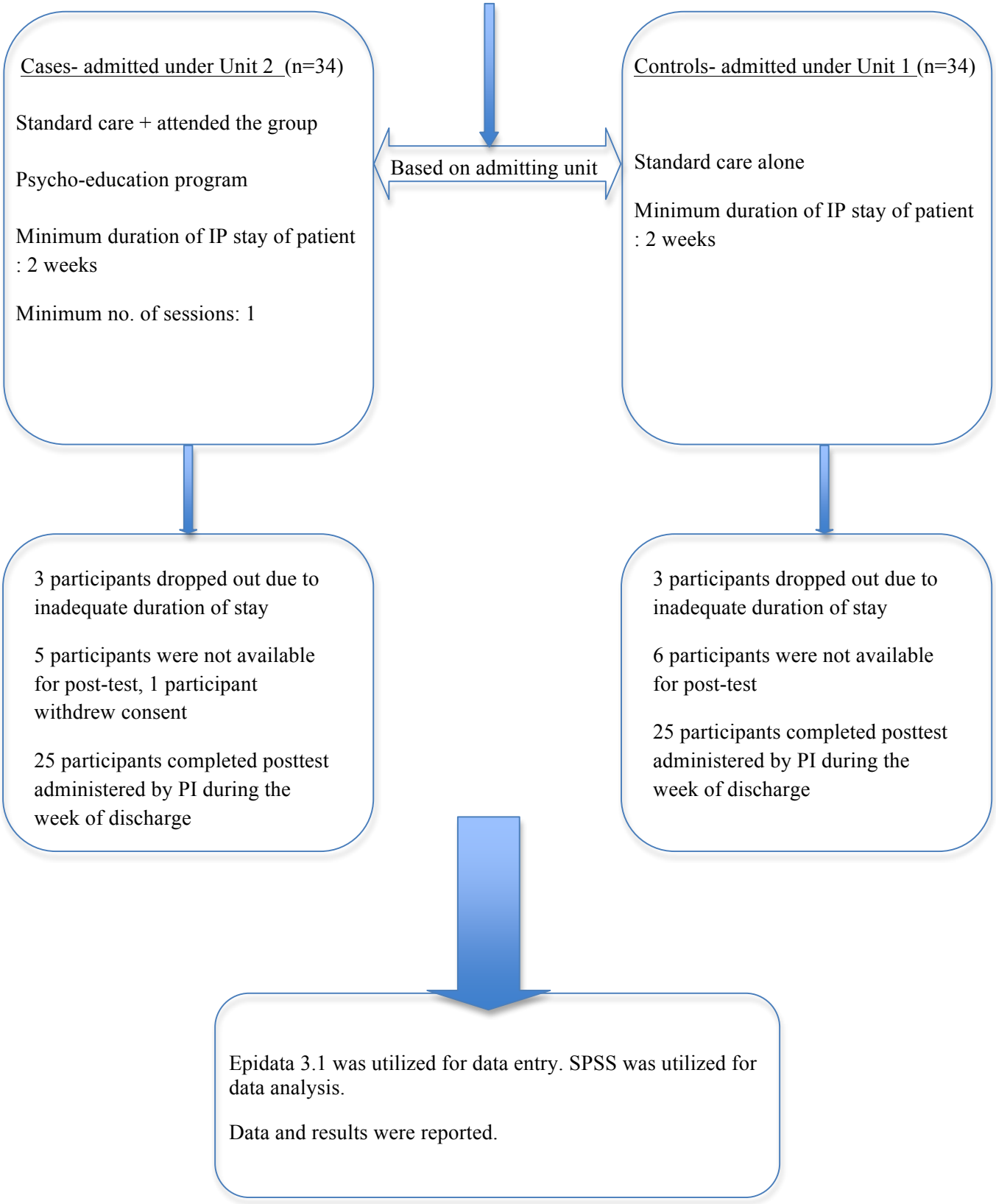
The primary investigator identified eligible caregivers of patients admitted with a diagnosis of schizophrenia. Caregivers were then invited to participate in the study during the course of their stay. Written informed consent was obtained and consenting caregivers were recruited.

The primary investigator collected their socio- demographic variables using a proforma designed by the investigators and then administered the (KASI) Questionnaire to assess their functional knowledge with regard to schizophrenia during the first week of admission (pre-test).

During the week of discharge, all participating caretakers, both attending and not attending the program were again administered the same KASI questionnaire as post-test by the primary investigator to assess the change in their functional knowledge with regard to schizophrenia.

Detailed flow chart of the study




Cases- admitted under Unit 2 (n=34)
Standard care + attended the group
Psycho-education program
Minimum duration of IP stay of patient : 2 weeks
Minimum no. of sessions: 1
Based on admitting unit
Controls- admitted under Unit 1 (n=34)
Standard care alone
Minimum duration of IP stay of patient : 2 weeks
3 participants dropped out due to inadequate duration of stay
5 participants were not available for post-test, 1 participant withdrew consent
25 participants completed posttest administered by PI during the week of discharge
3 participants dropped out due to inadequate duration of stay
6 participants were not available for post-test
25 participants completed posttest administered by PI during the week of discharge
Epidata 3.1 was utilized for data entry. SPSS was utilized for data analysis.
Data and results were reported.

Statistical methodology-

Determination of Sample size- Sample size was calculated using the hypothesis testing for two means based on Barrowclough et al., 1987.

Calculation of sample size was based on Barrowclough et al., 1987 using the hypothesis testing for two means. Power (80%) and alpha error (5%) were kept constant. The mean difference between both the groups was assumed to be 2.5 with an effect size of 0.83. The sample size obtained was 23 in each group with a total of 46.

Data analysis:

Epidata 3.1 was utilized for data entry. The categorical demographical variables were described in frequency and percentage and the continuous variables were described in mean and standard deviation.

Interpretation was done using SPSS (version 16.0.1). In order to avoid bias, a combination of numbers was used to code data to mask identification during statistical analysis.

Categorical variables were analyzed using chi- square test and continuous variables were analyzed using Mann- Whitney U test, Wilcoxon Signed Rank Test and t-test. Multivariate analysis was utilized to control for various parameters.

RESULTS

RESULTS

Description of the study population:

A total of 70 caregivers who fulfilled the eligibility criteria were contacted and were recruited after obtaining informed consent. Of the 70 participants, 2 were excluded after the revision of the diagnosis of the patient who was initially admitted with schizophrenia. 6 of the participants (3 in each group) dropped out of the study as their duration of the stay was less than 2 weeks. 12 (6 in each group) of the participants could not complete post-test due to various reasons including sudden unplanned discharges, unavailability during the week of discharge or withdrawal of consent.

The following are the results obtained after statistical analysis from the data of the 50 participants who successfully completed the study.

Socio-demographic variables of the study population:

With regard to the cases, table 1 shows that the mean age of the participants was 50.72 years with a range between 36.92 and 64.66 years.

Most of them were first degree relatives, usually parent or spouse, men and married. Most of them lived as nuclear families. 88% belonged to Hindu faith and 8% were Christians. 96% of the participants were literate. With regard to occupation, 60% of them were employed and 40% were homemakers. In terms of their socio-economic status, 52% belonged to a lower socioeconomic status.

With regard to the controls, table 1 shows that the mean age of the participants was 53.8 years with a range between 43.5 and 64 years. Most of them were first degree relatives, usually parent or spouse, men and married. Most of them lived as nuclear families. 84% belonged to Hindu faith and 12% were Christians. 96% of the participants were literate. With regard to occupation, 72% of them were employed, 24% were homemakers and 4% were unemployed. In terms of their socio- economic status, 76% belonged to a lower socioeconomic status and remaining 24% belonged to middle socioeconomic status.

There was statistical difference between groups in education. All other parameters were similar.

Significant differences between both groups

The groups differed significantly in education. In each group, 96% of the participants were literate. The degree of education was significantly higher among controls. Among the cases, 16% were graduates, 36% had studied up to

intermediate, 32% until secondary school and 12% until primary school. Among controls, 28% were graduates or higher, 4% had studied up to intermediate, 16% up to secondary school and 48% up to primary school.

Table 1: Socio-demographic variables **of both cases and controls (n=50)**

Variable	Cases n=25 n (%)	Control n=25 n (%)	p-value
Gender			0.777
Male	14(56%)	13(52%)	
Female	11(44%)	12(48%)	
Degree of relation			1
1. First	21(42%)	22(44%)	
2. Second	3(6%)	2(4%)	
3. Third	0	1(2%)	
4. Others	1(2%)	0	
Marital status			1
1. Single	1(4%)	1(%)	
2. Married	23(92%)	23	
3. Separated	0	0	
4. Divorced	0	0	
5. Widowed	1(4%)	1(4%)	
Religion			0.894
1. Hindu	22(88%)	21(84%)	
2. Muslim	1(4%)	1(4%)	
3. Christian	2(8%)	3(12%)	
4. Others	0	0	

Education 1. Graduate and higher 2. Intermediate 3. Secondary school 4. Primary School 5. Illiterate	 4(16%) 9(36%) 8(32%) 3(12%) 1(4%)	 7(28%) 1(4%) 4(16%) 12(48%) 1(4%)	**0.007**
Occupation 1. Homemaker 2. Professional 3. Skilled worker 4. Semi-skilled worker 5. Unskilled worker 6. Unemployed	 6(24%) 1(4%) 5(20%) 8(32%) 4(16%) 1(4%)	 10(40%) 2(8%) 5(20%) 7(28%) 1(4%) 0	0.521
Place 1.Rural 2.Urban	 17(68%) 8(32%)	 17(68%) 8(32%)	1
Family type 1.Nuclear 2.Joint	 24(96%) 1(4%)	 20(80%) 5(20%)	0.82
Socioeconomic status 1. Lower 2. Middle	 13(52%) 12(48%)	 19(76%) 6(24%)	0.77
Age, years	50.72	53.80	0.59

Age was compared using t- test and remaining categorical variables were compared using chi-square test

Clinical variables of the study population:

Among the **cases** (summarized in **table 2**), 20% had some other family member suffering from a psychiatric illness. 4% of the caregivers had visited a psychiatrist for their own mental health needs. 48% of the caregivers also served as a caregiver to a patient with psychiatric illness in the past. 48% reported having acquired their information about mental health and management from friends and family, 12% from patients with psychiatric illness and 40% from medical professionals.

The mean duration of illness of the patient was 6 years. The mean duration of stay of their patient was 7 weeks. The mean number of group psycho education sessions attended by the group was 2.4

Among the **controls** (summarized in table 2), 16% had some other family member suffering from a psychiatric illness. None of the caregivers had ever visited a psychiatrist for their own mental health needs. 40% of the caregivers had also served as a caregiver in the past. 68% reported having acquired their information about mental health and management from friends and family, 24% from patients with psychiatric illness and 8% from medical professionals. The mean duration of illness of the patient in control group was 5.16 years. The mean duration of stay of their patient was 4.38 weeks.

Table 2: Clinical variables of the study population **(n=50)**

Variable	Cases (n=25) n (%)	Controls(n=25) n(%)	p-value
Family history of psychiatric illness Yes No	 5(20%) 20(80%)	 4(16%) 21(84%)	0.713
Past visits to Psychiatrists for self Yes No	 1(4%) 24(96%)	 0 25(100%)	0.312
Caregiver during past admissions Yes No	 12(48%) 13(52%)	 10(40%) 15(60%)	0.569
Source of knowledge about mental health or treatment Friends and family Patients of mental illness Medical professionals	 12(48%) 3(12%) 10(40%)	 17(68%) 6(24%) 2(8%)	0.27
Duration of illness of the patient, years: n	6.04	5.16	0.380
Duration of stay of the patient, weeks: n	7	4.38	0.001
Number of group psycho education sessions attended	2.40	0	0.001

Mann- Whitney U test was performed which revealed no significant difference in the duration of illness of patients in both cases and controls. There was significant difference in the duration of stay of patients in the cases group. Controls did not attend any group psychoeducation sessions as per the methodology.

Comparison of pretest and posttest scores of the total population:

The median of differences between pretest to posttest scores of KASI and its subsections, of both groups combined using the Related-samples Wilcoxon Signed Rank Test is significant with a value of 0.001.

This shows that psycho education received through various sources (including doctors, nurses, social workers, other patients and families) from admission until discharge has produced significant change in knowledge.

Table 3: Differences between total pretest and posttest KASI scores of the study population

Variable	Pre test KASI Score	Post test KASI score	p-value
Total score			0.001
Mean	29.6	39.44	
Std. deviation	7.02	5.62	
Diagnosis score			0.001
Mean	2.70	3.36	
Std. deviation	0.678	0.598	
Symptomatology			0.001
Mean	2.72	3.36	
Std. deviation	0.757	0.631	
Etiology score			0.001
Mean	1.94	2.92	
Std. deviation	0.818	0.829	
Medication score			0.001
Mean	2.50	3.14	
Std. deviation	0.909	0.639	
Course and prognosis score			0.001
Mean	2.42	3.46	
Std. deviation	0.758	0.613	
Management score			0.001
Mean	2.52	3.48	
Std. deviation	0.814	0.580	

Comparison of pretest and posttest KASI scores of cases and controls:

Since, both groups were not comparable and showed significant difference with regard to level of education, logistic regression was done to adjust for education status.

When educational status of the cases and controls were controlled, group psycho education produced a significant change in KASI scores in subsections of management, course and prognosis.

Following tables demonstrate significant change in KASI in the following subsections when education status was controlled.

Table 4: **Multivariate analysis**: summary of significant difference in scores on adjusting for education

Variable	Mean	Standard deviation	Pearson-chi square	p-value
Difference of management scores	0.96	0.925	0.771	**.002**
Difference of course and prognosis scores	1.04	0.903	0.845	**.035**

For elaboration, following tables show detailed analysis of the differences between total pretest and posttest KASI scores and KASI subsections of the study population.

Table 5: Total scores on pretest and posttest KASI of the study population

	Pre-test Score	Sig.	Post-test score	Sig.	Difference	Sig.
Case		.519		.739		.343
Mean	14.5		20		5.4	
Std. deviation	3.86		2.44		3.7	
Control						
Mean	15		19.4		4.3	
Std. deviation	3.16		3.18		2.39	

Table 6: Pre-test and post-test scores on KASI-diagnosis subsection

	Pre-test diagnosis Score	Post-test diagnosis score	Difference	Sig.
Case				0.1
Mean	2.60	3.40	0.80	
Std. deviation	0.577	0.577	0.645	
Control				
Mean	2.8	3.32	0.52	
Std. deviation	0.764	0.627	0.714	

Table 7: Pre-test and post-test scores on KASI-symptomatology subsection

	Pre test symptomatology Score	Post test symptomatology score	Difference	Sig.
Case				0.301
Mean	2.72	3.24	0.52	
Std. deviation	0.737	0.663	0.653	
Control				
Mean	2.72	3.48	0.76	
Std. deviation	0.737	0.586	0.723	

Table 8: Pre-test and post-test scores on KASI- etiology subsection

	Pre-test etiology score	Post-test etiology score	Difference	Sig.
Case				0.157
Mean	1.84	3.00	1.16	
Std. deviation	0.898	0.816	1.028	
Control				
Mean	2.04	2.84	0.80	
Std. deviation	0.735	0.850	0.866	

Table 9: Pre-test and post-test scores on KASI- medication subsection

	Pre-test medication Score	Post-test medication score	Difference	Sig.
Case				0.983
Mean	2.52	3.20	0.68	
Std. deviation	0.963	0.5	0.945	
Control				
Mean	2.48	3.08	0.60	
Std. deviation	0.872	0.759	0.764	

Table 10: Pre-test and post-test scores on KASI-management subsection

	Pre-test management Score	Post-test management score	Difference	Sig.
Case				0.73
Mean	2.40	3.40	1.24	
Std. deviation	0.957	0.577	1.091	
Control				
Mean	2.64	3.32	0.68	
Std. deviation	0.638	0.627	0.627	

Table 11: Pre-test and post-test scores on KASI-course and prognosis subsection

	Pre-test course and prognosis Score	Post-test course and prognosis score	Difference	Sig.
Case				0.958
Mean	2.44	3.52	1.08	
Std. deviation	0.917	0.586	1.115	
Control				
Mean	2.4	3.4	1.00	
Std. deviation	0.577	0.645	0.645	

Following tables demonstrate the change in KASI in each of the subsections on controlling for education status.

Table 12: Difference in diagnosis score on controlling for education

Comparables	Mean	Standard deviation	Pearson-chi square	Likelihood chi square
Difference	0.66	0.688	0.490	0.594

Parameter	B	95% Wald confidence interval		Hypothesis test	
		Lower	Upper	Wald chi-Square	Sig
Cases	0.249	-.179	.678	1.301	.254
Controls	0	-	-	-	-
Illiterate	.011	-.980	1.003	.001	0.982
Primary	.253	-.263	.769	.924	0.334
Secondary	.137	-.416	.689	.234	0.628
Intermediate	.312	-.296	.919	1.010	0.315
Graduation	0	-	-	-	-

Table 13: Difference in symptomatology score on controlling for education

Comparables	Mean	Standard deviation	Pearson-chi square	Liklihood chi square
Difference	0.64	0.693	0.496	0.583

Parameter	B	95% Wald confidence interval		Hypothesis test	
		Lower	Upper	Wald chi-Square	Sig
Cases	-.223	-.654	0.208	1.030	.310
Controls	0	-	-	-	-
Illiterate	-.606	-1.60	.391	1.419	0.234
Primary	.127	-.392	.646	.231	0.631
Secondary	.015	-.541	.571	.003	0.959
Intermediate	.083	-.528	.694	0.072	0.789
Graduation	0	-	-	-	-

Table 14: Difference in etiology score on controlling for education

Comparables	Mean	Standard deviation	Pearson-chi square	Liklihood chi square
Difference	0.98	0.958	0.864	0.134

Parameter	B	95% Wald confidence interval		Hypothesis test	
		Lower	Upper	Wald chi-Square	Sig
Cases	.429	-.140	.998	2.179	.140
Controls	0	-	-	-	-
Illiterate	-1.46	-2.78	-.152	4.779	0.029
Primary	.161	-.524	.846	.213	0.645
Secondary	.211	-.523	.945	.318	0.573
Intermediate	-.139	-.946	.668	0.114	0.735
Graduation	0	-	-	-	-

Table 15: Difference in medication score on controlling for education

Comparables	Mean	Standard deviation	Pearson-chi square	Liklihood chi square
Difference	0.64	0.851	0.736	0.463

Parameter	B	95% Wald confidence interval		Hypothesis test	
		Lower	Upper	Wald chi-Square	Sig
Cases	.115	-.441	.640	.183	.669
Controls	0	-	-	-	-
Illiterate	-.516	-1.730	.699	.692	0.405
Primary	-.448	-1.080	.184	1.929	0.165
Secondary	-.701	-1.379	-.024	4.119	0.042
Intermediate	-.261	-1.006	.483	0.474	0.491
Graduation	0	-	-	-	-

Table 16: Difference in management scores on controlling for education

Comparables	Mean	Standard deviation	Pearson-chi square	Liklihood chi square
Difference	0.96	0.925	0.771	0.061

Parameter	B	95% Wald confidence interval		Hypothesis test	
		Lower	Upper	Wald chi-Square	Sig
Cases	0.839	.301	1.377	9.351	**.002**
Controls	0	-	-	-	-
Illiterate	-.524	-1.767	.720	.681	0.409
Primary	.362	-.285	1.009	1.2	0.273
Secondary	-.413	-1.107	.280	1.36	0.243
Intermediate	-.259	-1.022	.503	0.44	0.505
Graduation	0	-	-	-	-

Table 17: Difference in course and prognosis score on controlling for education

Comparables	Mean	Standard deviation	Pearson-chi square	Liklihood chi square
Difference	1.04	0.903	0.845	0.529

Parameter	B	95% Wald confidence interval		Hypothesis test	
		Lower	Upper	Wald chi-Square	Sig
Cases	1.366	.095	2.637	4.435	**.035**
Controls	0	-	-	-	-
Illiterate	-.561	-1.967	.845	.612	0.434
Primary	-.046	-.901	.809	.011	0.916
Secondary	-.518	-1.328	.293	1.567	0.211
Intermediate	-.451	-1.258	.356	1.199	0.273
Graduation	0	-	-	-	-

DISCUSSION

DISCUSSION

This study was primarily designed to assess the effectiveness of group psychoeducation in improving functional knowledge of schizophrenia among caregivers of in-patients admitted at Mental Health Centre, Bagayam. This group psychoeducation program is currently being implemented at Unit 2, Department of Psychiatry, CMC Vellore.

Several studies mentioned in the review of literature compared different modalities of psychoeducation in their effectiveness to influence clinical outcomes such as relapse rate, reduction in rating scale scores, expressed emotion etcetera. However very few studies measured improvement in knowledge. The scales used for the assessment largely differed with very few studies using KASI as an assessment tool. Therefore, direct comparisons with studies could not be made.

Socio-demographic variables of the sample population:

With regard to *gender* of caregivers, our study shows that approximately 60% of the caregivers were males. This is similar to the study done by Shinde et al., 2014(21) in Maharashtra, India which might indicate that male caregivers played a leading role when compared to women.

With regard to *sources of information* for caregivers, our study showed that all the caregivers recruited had some knowledge about schizophrenia. 58% of the caregivers learnt through friends and family and 24% from medical professional. In a similar study on caregivers in Maharashtra, nearly 30% had no prior knowledge of schizophrenia and learnt through experience of care giving to the patient. Medical health professionals were source to 30% of the sample, 10% acquired from friends and 3% from newspapers. This discrepancy is perhaps due to the reason that CMC Vellore is a tertiary care centre and nearly 44% of the caregivers in our study already served as caregivers in the past.

Several studies(33)(34) including Barrowclough et al.,1987, utilized a psychoeducation booklet for reference between sessions and further clarification of doubts. We supplemented the same using fact sheets written in simple and vernacular terms (attached as appendix).

KASI as an assessment tool

KASI assessed responses based on allocation of values as neutral, negative or positive functional value. KASI pre-test and post-test were adequately spaced to assess long term retention and not immediate recall following the psychoeducation program.

KASI has 6 subsections including diagnosis, symptomatology, aetiology, medication, course and prognosis and management.

Diagnosis:

In the diagnosis section, relatives were expected to mention the name of the illness as schizophrenia for scores 3 and above. Most of the caregivers did not know English and found it difficult to pronounce the word ‘Schizophrenia’ or

its translation in native Tamil. This could have reflected as lower scores in this section.

Symptomatology:

In the symptomatology section, caregivers were expected to know the symptoms of schizophrenia and common presentations. In the study population, the answers to this subset were given as per the presentation of their relative currently admitted as in-patient and not as per the description in the fact sheet or psycho education. This was also reflected in the answers in post-test KASI when a few caregivers described the side effects of the anti-psychotic medication as part of the illness symptomatology. Lower educational and poor understanding could have contributed to low scores in this section.

Aetiology:

In the aetiology subsection, participants were expected to accept the biological basis of schizophrenia. However, with majority of the caregivers were educated only up to primary school and found it difficult to understand the concept of neurotransmitters and brain function. Academic and marital stressors which occurred temporally were reported as etiological and precipitating factors during interview. Multiple explanatory models were commonly seen among caregivers and our psycho education is not directive in making participants

replace their existing model with a biological model but only incorporating the biological model into their existing model, if possible.

In our study we noted that KASI subsections on diagnosis, symptomatology made greater change in comparison to aetiology. This correlates with a similar study done by Sheela das et al., 2006 (51) on 100 out-patients which found that psycho education could not produce significant changes in explanatory models.

Medication:

In the medication section, caregivers were expected to know the name, prophylactic need and that medication has to be continued as long as prescribed by the doctor. Psycho education at our hospital places emphasis on these aspects and usually participants are well aware of this, even if they disagree. However, it may be possible that due to the lower level of education in the sample population, very few knew the names of the medication which was required for the additional scoring on medication subsection of KASI.

Though most patients did not know the name of the medication, all caregivers with their patients on Clozapine were able to answer to questions in the medication subsection. Also, caregivers of patients on Clozapine had greater scores on their KASI score in comparison to other antipsychotic medication. This could be explained by the longer duration of illness, multiple number of

admissions, longer duration of stay, greater number of psychoeducation sessions attended and possibly special attention to psycho education by the doctors and primary therapists in the process of acquiring informed consent for Clozapine and information given about regular monitoring.

Management, course and prognosis sections:

In the management, course and prognosis sections, caregivers are expected to know actions that could be damaging to the process of recovery. As a family oriented setting, the caregiver is in contact with the patient for a majority of time and ways to approach and manage patients are usually learnt during the course of their stay under supervision of mental health personnel including occupational therapists. This could have been responsible for good scores on these sections. In addition, participants in the question and answer session following their group psycho education program have a special opportunity to clarify several aspects regarding management, marriage, job which could have been responsible for the higher scores among cases in comparison to the controls.

Barrowclough et al., 1987(33) used Knowledge About Schizophrenia Interview(KASI) and demonstrated significant change in knowledge after a brief intervention, among all 6 sub-sections of KASI except medication. Our

study also demonstrated improvement except in diagnosis, symptomatology and medication.

Sota et al., 2008(55) used a modified version of KASI known as m-KASI for comparing small group with two sessions, large group with five and nine sessions to demonstrate similar results of increase in knowledge. However, our study was able to demonstrate significant change in knowledge scores of KASI on management, course and prognosis sections. There could be several factors influencing this result which are analysed below.

Effect of group psychoeducation program:

Our study showed an increase in functional knowledge of schizophrenia among caregivers in all subsections of KASI with routine psychoeducation. Routine psychoeducation in our setting involves one-to-one sessions with psychiatrist-who is the primary therapist, nurses and social workers during their course of stay in the hospital.

However certain aspects of psychoeducation can be addressed more effectively in groups. Our study demonstrated group psychoeducation to be an effective and feasible tool in Indian setting (resource poor and culturally diverse) to further increase knowledge of schizophrenia especially with regard to practical aspects such as management, course and prognosis.

A higher effect size could have been obtained with higher sample sizes.

In comparison to other studies(42), our psychoeducation program was less structured with number of sessions ranging from one to four sessions. Several studies including Thara et al., 2005 (42) in a study done at SCARF, Chennai had a recommendation of a minimum of two sessions.

The psychoeducation program was spaced once every two weeks to allow adequate time for understanding of the information and discussion of their queries. More than one relative per patient was allowed to attend the same psychoeducation session, but were treated as separate cases.

Other qualitative observations:

Social workers reported that several caregivers had to be reminded for group psycho education session, and appeared disinterested during the program, with poor interaction in the questions and answer session following the group psycho education program. This observation indicates the need to find more ways to engage the caregivers with regard to psychoeducation.

Some of the participants returned the factsheets at the time of discharge citing the reasons that factsheet, if read by anyone else in the house or locality would

raise stigma. A few caregivers admitted that they hadn't read the factsheets and were not worried about the illness as the patient had already recovered and would return to their jobs and family. This observation reflects the influence of various social factors such as stigma in the health seeking attitude of our study population.

On the other end, observer effect or Hawthorne effect also cannot be denied with participants being aware that their knowledge on the same questions would be tested again at the time of discharge. The same could be applied to social workers conducting the group psychoeducation program. Their awareness about the ongoing project could have made them put greater efforts or emphasis on certain sections of the psycho education program which could have indirectly influenced the posttest KASI scores.

Therefore, our study suggests that psycho education of caregivers of in-patients admitted could be considered as a valuable opportunity and might prove beneficial especially in developing nations where separate psycho education as part of out-patient consultation is not a feasible option.

CONCLUSIONS

CONCLUSIONS

In this quasi-experimental two group pre-test and post-test study done to assess the effectiveness of a group psycho education program being implemented at the Department of Psychiatry- CMC Vellore, it has been demonstrated that:

- Routine psychoeducation of caregivers of in-patients involving psychiatrists, nurses and social workers had resulted in significant improvement of their knowledge of schizophrenia at discharge compared to admission.
- Groups differed on education and control group had higher education than cases group.
- On adjusting for education to make both the groups comparable, participants attending the group psychoeducation program(cases group) were seen to have made futher and significant improvement in knowledge with respect to management, course and prognosis of Schizophrenia.

LIMITATIONS

LIMITATIONS

- Though KASI has been chosen as an appropriate questionnaire for our study, the group psycho education module covers several aspects of Schizophrenia which need not reflect completely in the KASI scores.

- Other factors such as relationship with patient, caregiver characteristics, duration of illness and length of stay, number of hospital admissions, scores on psychiatry rating scales could have been studied.

- Though the primary investigator (PI) was not involved in the administration of the psycho education program, the PI was being rotated among the units during the study and was aware of the patients in cases and controls. Since the scoring criteria were based on relative answers, PI involved in scoring could have unknowingly been biased in giving greater scores to participants in the cases group.

STRENGTHS

STRENGTHS

- Sample size has been achieved – hence the conclusions have statistical validity.

- This is a pragmatic trial; hence the results are generalizable to the population from which the sample was drawn.

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APPENDICES

APPENDICES

Appendix I: Data Collection Sheet

Serial Number:……..

1) Name of the participant:
2) Name of the patient:
3) Degree of relation: 1. First 2. Second 3. Third 4. Others
4) Age: …….. Years
5) Gender: 1. Male 2. Female 3. Other
6) Marital Status: 1. Single 2. Married 3. Separated 4. Divorced 5. Widowed
7) Religion: 1. Hindu 2. Muslim 3. Christian 4. Others (specify)
8) Education: 1. Graduate or higher
   2. Intermediate
   3.Primary School
   4. Illiterate
9) Occupation: 1.Professional
   2. Skilled worker
   3.Semi-skilled worker
   4.Unskilled worker
   5.Unemployed
10) Place: 1. Rural 2. Urban
11) Family type: 1. Nuclear 2. Joint
12) Socio-economic Status: 1. Lower 2. Middle 3.Upper
13) Has any other family member suffered or is suffering from psychiatric illness? Y/N
14) In the past, have you ever visited a Psychiatrist for your health issues? Y/N

15) In the past or present, have you been a caregiver to any other patient with psychiatric illness? Y/N

16) Which of the following have you accessed for knowledge regarding the psychiatric illness?

1. TV/ Radio/ Newspaper
2. Internet
3. Friends and family
4. Patients of psychiatric illness
5. Medical professional

Appendix II: Informed Consent form

Study Title: Effects of Psychoeducation on the knowledge of caregivers of people with Schizophrenia

Study Number: _____

Subject's Initials: _____

Subject's Name: _____

Date of Birth / Age: _____

(i) I confirm that I have read and understood the information sheet for the above study and have had the opportunity to ask questions. [ ]

(ii) I understand that my participation in the study is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected. [ ]

(iii) I understand that investigators, the Ethics Committee and the regulatory authorities will not need my permission to look at my health records both in respect of the current study and any further research that may be conducted in relation to it, even if I withdraw from the trial. I agree to this access. However, I understand that my identity will not be revealed in any information released to third parties or published. [ ]

(iv) I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s). [ ]

(v) I agree to take part in the above study. [ ]

Signature (or Thumb impression) of the Subject/Legally Acceptable

Date: _____/_____/_____

Signatory's Name: _____ Signature:

Or

Representative: _____

Date: _____/_____/_____

Signatory's Name: _____

Signature of the Investigator: _____

Date: _____/_____/_____

Study Investigator's Name: _____

Signature or thumb impression of the Witness: _____

Date: _____/_____/_____

Name & Address of the Witness: _____

Appendix III: Informed consent sheet- Tamil version

ஒப்புதல் படிவம்

ஆய்வின் விளக்கம் தெரிவிக்கப்பட்டு கலந்துகொள்பவரின் ஒப்புதல் படிவம்

ஆய்வின் தலைப்பு:
மனச்சிதைவு நோய் பாதிக்கப்பட்ட நோயாளிகளுக்கு, பாதுகாவலர்கள் உதவி செய்வதில் அவர்களுக்கு அளிக்கப்படும் பயிற்சி மற்றும் அதைப்பற்றிய விளக்கத்தினால் உண்டான பயன்கள் பற்றிய ஆய்வு.

ஆய்வின் எண்:
கலந்துகொள்பவரின் முதற்பெயர்:
கலந்துகொள்பவரின் பெயர்:
பிறந்த தேதி / வயது:

(i) ஆய்வு பற்றிய தகவல் தாள் எனக்கு கொடுக்கப்பட்டது. அதை நான் நன்றாக படித்து ஆய்வின் விளக்கங்களை தெரிந்துகொண்டேன். மேலும் ய்வு பற்றிய விபரங்ககளை கேட்பதற்கு வாய்ப்பு எனக்கு அளிக்கப்பட்டு நான் புரிந்துகொள்ளும் வகையில் எனக்கு தெளிவான விளக்கம் அளிக்கப்பட்டது.

(ii) நான் எனது முழு விருப்பத்துடன் இந்த ஆய்வில் கலந்து கொண்டுள்ளேன். இதனால் எனக்கு அளிக்கப்படும் சிகிச்சையில் எந்த தடையும் ஏற்படாமல், இந்த ஆய்விலிருந்து எப்போது வேண்டுமானாலும் விலகிக்கொள்ள எனக்கு முழு சுதந்திரம் தரப்பட்டுள்ளது.

(iii) நான் புரிந்து கொண்டது என்னவென்றால் மருத்துவ சோதனைக்கு பண உதவி செய்பவர்கள் அல்லது அவர்களுக்கு பதிலாக பண உதவி செய்பவர்கள், நன்னடத்தை குழு, கட்டுப்பாட்டு அதிகாரிகள் ஆகியோருக்கு என்னுடைய உடல்நலம், மனநலம் பற்றிய மருத்துவக் குறிப்புகளைப் பார்ப்பதற்கு என்னுடைய அனுமதி தேவையில்லை என்பதும் நான் ஆய்வில் இருந்து விலகிக்கொண்டாலும் இப்பொழுதோ அல்லது எதிர்காலத்திலோ, என்னுடைய அனுமதி தேவையில்லை என்பதை அறிவேன். என்னுடைய மருதுவக் குறிப்புகளைப் பார்ப்பதற்கு சம்மதிகின்றேன். என்னுடைய பெயர் மற்றும் முகவரி மூன்றாவது மனிதர்களுக்கு தெரியப்படுத்தப்படமாட்டது என்பதையும் அறிவேன்.

(iv) இந்த ஆய்வின் கண்டுபிடிப்புகள் அறிவியல் நோக்கத்திற்காக மட்டுமே பயன்படுத்தப்படுவதை நான் அனுமதிக்கின்றேன்.

(v) நான் இந்த ஆய்வில் கலந்துகொள்ள முழுமனதுடன் சம்மதிக்கின்றேன்.

பங்குகொள்பவரின் கையொப்பம்: _____
(அல்லது) இடது கைபெருவிரல் ரேகை
தேதி: _____
பங்குகொள்பவரின் பெயர்: _____

சட்டப்படியானபிரிதி: _____
தேதி: _____
பெயர்: _____

ஆய்வாளரின்கையொப்பம்: _____
தேதி: _____
பெயர்: _____

சாட்சியின் பெயர் & கையொப்பம்: _____
முகவரி: _____

Appendix IV: Subject Information sheet- English version

Title of study:
Effects of Psychoeducation on the knowledge of caregivers of people with schizophrenia

Institution:
Christian Medical College, Vellore

Nature and purpose of the study:
You are invited to take part in this study that attempts to understand the effects of group- education on the knowledge of the family and caregivers of patients with schizophrenia.

Procedure to be followed:
This study will be conducted by the Department of Psychiatry during the course of your stay at the hospital. The doctor will collect information through a questionnaire regarding your knowledge related to schizophrenia and it's treatment at the time of admission and discharge. Related information will also be collected from the medical records of the patients'.

Expected duration of involvement:
You will be involved in the study with your consent from the time of admission to discharge of your relative.

Possible benefits of the study:
The information obtained will help us better understand your knowledge of schizophrenia and how our education program influences it. This will benefit others caretakers in similar situations.

Confidentiality:
The records and details obtained in this study will remain confidential at all times. Your personal data will be collected and processed only for research purposes. You will not be referred to by name or identified in any report or publication.

Right to withdraw from the study:
Your participation in this study is voluntary and you are free to leave the study at any time. Your decision to not to participate in this study will not affect your relative's future medical or psychiatric care in our hospital.

For further queries you may contact:

Dr. Raviteja Innamuri
Department of Psychiatry, Christian Medical College, Vellore 632002
Phone: 0416 228 4520, email: psych2@cmcvellore.ac.in

Appendix V: Subject Information sheet- Tamil version

தகவல் தாள்

ஆய்வின் தலைப்பு:
மனச்சிதைவு நோய் பாதிக்கப்பட்ட நோயாளிகளுக்கு, பாதுகாவலர்கள் உதவி செய்வதில் அவர்களுக்கு அளிக்கப்படும் பயிற்சி மற்றும் அதைப்பற்றிய விளக்கத்தினால் உண்டான பயன்கள் பற்றிய ஆய்வு.

ஆய்வின் விளக்கமும், நோக்கமும்:
மனச்சிதைவு நோயுற்றவர்களுக்கு அளிக்கப்படும் சிகிச்சைக்கு உதவ பாதுகாப்பாளர்களான இருக்கும் உங்களுக்கு இந்த நோய் பற்றிய விளக்கத்தையும், பயிற்சியையும் அளிக்க முயலும் இந்த ஆய்வில் பங்கேற்க உங்களை அன்புடன் வரவேற்கின்றோம்.

இந்த ஆய்வில் பின்பற்ற இருக்கும் செயல்முறை:
மனநோய் மருத்துவப் பிரிவிலிருந்து ஒரு மருத்துவர் இந்த ஆய்வினை மேற்கொள்வார். அவர் உங்களுக்கு இந்த மனச்சிதைவு பற்றிய உங்கள் எண்ணங்களையும், எந்த அளவுக்கு இந்நோய் பற்றிய அறிவு சார்ந்த விவரங்களை சில கேள்விச்சாதனங்கள் மூலம் சேகரிப்பார். உங்களின் மருத்துவ பதிவுகளிலிருந்து இதை சார்ந்த தகவல்களை சேகரிக்கப்படும்.

எதிர்பார்க்கப்படும் பங்கேற்பு காலம்:
நோயாளி மருத்துவமனையில் அனுமதிக்கப்பட்ட நாளிலிருந்து அவர் மருத்துவமனையிலிருந்து மீண்டும் வீடு செல்லும் வரை.

இந்த ஆய்வின் மூலம் ஏற்படும் நன்மைகள்:
எங்களுக்கு இந்த ஆய்வின் மூலம் கிடைக்கும் தகவல்களினால் நீங்கள் உங்கள் நோயை எவ்வாறு புரிந்து கொண்டிருக்கிறீர்கள் மற்றும் சந்திக்க நேரும் சவால்களை எவ்வாறு சமாளிக்கிறீர்கள் என்பதை நாங்கள் நன்கு புரிந்துகொள்ள உதவும். இது இந்த சூழ்நிலையில் உள்ள மற்றவர்களுக்கு நன்மையாக இருக்கும்.

இரகசியமாக பாதுகாப்பு:
இந்த ஆய்வின் மூலம் பெறப்படும் ஆவணங்கள் மற்றும் தகவல்கள் எல்லா நேரத்திலும் இரகசியமாக வைக்கப்படும். உங்களின் தனிப்பட்ட தகவல்கள் சேகரிக்கப்பட்டு இந்த ஆய்விற்காக மட்டுமே பயன்படுத்தப்படும். தங்களின் பெயர் மற்றும் அடையாளம் எந்த ஒரு அறிக்கையிலோ அல்லது வெளியீட்டிலோ தெரியப்படுத்தமாட்டாது.

ஆய்விலிருந்து விலகிக்கொள்வதற்கான உரிமை:
இந்த ஆய்விலிருந்து விலகிக்கொள்வதற்கு எந்த நேரமும் தங்களுக்கு முழு சுதந்திரம் உண்டு. தாங்கள் இந்த ஆய்வில் பங்கேற்பதற்கும் அல்லது மறுப்பு தெரிவிப்பதற்கும் எடுக்கும் முடிவு, எங்கள் மருத்துவமனையில் உங்களுடைய அல்லது உங்களது உறவினருடைய எதிர்கால மருத்துவ மற்றும் மனநல சிகிச்சையை பாதிக்காது.

மேலும், ஏதேனும் கேள்விகளுக்கு கீழ்கண்ட முகவரிக்கு தொடர்புகொள்ளுங்கள்

மரு. ரவிதேஜா இன்னாமூரி,
மனநல மருத்துவமனை,
கிறிஸ்தவ மருத்துவக் கல்லூரி,
வேலூர்- 632 002.
தொலைப்பேசி எண்: 0416 2284520;
மின் அஞ்சல்: psych2@cmcvellore.ac.in

Appendix VI: Knowledge about schizophrenia interview (KASI)

Introduction

I would like to ask some questions about ……..'s admission to hospital ,what you know about it, what he/she was treated for ,what the treatment was and so on.This is to help us give you and other relatives any information about your relative's condition that you might need. We just want to find out what you think or know already.

Section1: DIAGNOSIS

1.1 What have you been told by the doctors, nurses or other people about the problem that he/she was treated for?……
(Question if necessary to identify source)……..

1.2 (If a diagnosis is not given) Do you know the name of the problem /diagnosis?……

1.3 (If answers to 1.1 and 1.2 are inadequate) What kind of problem do you think he/she was treated for?……

1.4 (If gives some diagnosis) What do you understand by the name of the problem given? Do you think it is?

	Yes	No	Don't know
a. Having a minor nervous condition	☐	☐	☐
b. A severe mental illness, which can affect all aspects of a person's life?	☐	☐	☐
c. Others (specify)	☐	☐	☐

Section 2: SYMPTOMATOLOGY

2.1 You have mentioned that his/her problems affected her/him by: (List symptoms that the relative has mentioned. DO you think this is his/her natural self, or do you think its part of '……(insert name of problem given)'?

	Natural Self	Illness	Don't know
(a)	☐	☐	☐
(b)	☐	☐	☐
(c)	☐	☐	☐
(d)	☐	☐	☐
(e)	☐	☐	☐

2.2 Do you know any other ways in which she/he was affected e.g. strange ideas or difficulties with her/his thinking?……..

2.3 Do you think he/ she could help or control …… (repeat 'symptoms' listed in 2.1 and elicited in 2.2)

	Yes	No	Don't know
(a)			
(b)			
(c)			
(d)			
(e)			
(f)			
(g)			
(h)			

2.4 Do you know the most common and important symptoms (difficulties) of people who have ……(insert whatever relative calls person's illness)?

2.5 Do you think the most common and important symptoms are

	Yes	No	Don't know
a. Hallucinations-hearing, seeing or smelling things which others can't hear see or smell			
b. Delusions-totally false beliefs others don't share			
c. Disturbances of thinking such as thoughts being put into your head or broadcast to other people			

Section3: ETIOLOGY

3.1 What do you think is the cause of his/her illness. (insert whatever relative calls person's illness)'?

……

3.2 Do you think any of the following might have caused it?

	Yes	No	Don't know
a. A biological illness affecting the way the brain works?			
b. The way someone is brought-up? (e.g. having an unhappy childhood)			
c. It is inherited (runs in families)?			
d. (add causes mentioned by relative)			

3.3 Of all things just mentioned what do you think is the main cause?

……

3.4 Ask only if relative gives incorrect answer to any of previous questions in this section.

You said that you think……..may cause…….. (insert relatives name for condition).Is there anything you might do to help remedy this/ or sort this out?

……

Section 4: MEDICATION

4.1 Has the doctor or psychiatrist prescribed any tablets or injections for him/her? Yes/No/Don't Know

Tablets/Injections/Don't Know Which

4.2 What is the name of the tablet/injection?…….

4.3 How often will he/she take these tablets /injections?…….

4.4 Where will he/she get these from? ……...

4.5 For how long will he/ she take these tablets/injections?

a few weeks/a few months/a year/2 years/more than 2 years

4.6 Do you think these tablets/injections should be taken [read out all alternatives before relative selects choice (s)]

		Yes	No	Don't know
a.	When he/she thinks she/he needs them?	☐	☐	☐
b.	Until he/she seems better again?	☐	☐	☐
c.	When you (or other friends/relatives) think he/she needs them?	☐	☐	☐
d.	As the doctor says/prescribes?	☐	☐	☐
e.	Not at all?	☐	☐	☐

4.7 Do you know of any side effects which might occur as a result of taking the tablets/injections?

……

Section 5: COURSE AND PROGNOSIS

		Yes	No	Don't know
5.1	Do you think that he/she may have problems again?	☐	☐	☐

5.2 Which of the following are likely to make (insert whatever relative calls for condition) worse or bring her/his problems back?

		Yes	No	Don't know
a.	Having nothing to do?	☐	☐	☐
b.	Stressful life problems (e.g. moving house, getting divorced)?	☐	☐	☐
c.	Being pushed and nagged by the family or home?	☐	☐	☐
d.	Not taking her/his tablets/ injections?	☐	☐	☐
e.	Anything else? (include items previously mentioned by relatives)	☐	☐	☐

5.3 Suppose he seemed and felt completely better and decided to stop taking the tablets/injections. What do you think would happen? [Read out all alternatives before relative selects choice(s)]

		Yes	No	Don't know
a.	She/he would be better off without them?	☐	☐	☐
b.	It would make no difference to her/him?	☐	☐	☐

c. She/he might start to get worse again after a while?	☐	☐	☐

Section 6: MANAGEMENT

6.1 Do you think there is anything you can do to help his/her ……..(insert whatever relative calls condition)?…….

6.2 Do you think there is anything you should not do?…….

6.3 Do you think any of the following might help?

	Yes	No	Don't know
a. Encouraging him/her to take her/his tablets or injections?	☐	☐	☐
b. Looking after him/her by doing his/her washing cooking etc.	☐	☐	☐
c. Spending as much time as possible with her/him?	☐	☐	☐
d. Encouraging her/him to gradually get back to doing things for her/himself?	☐	☐	☐
e. Giving her/him a good push to get going?	☐	☐	☐

6.4 N.B. Ask only if relative has mentioned a potentially detrimental management strategy in this section or elsewhere in the interview. You mentioned that you ……(specify strategy)

Probe: e.g. Could you tell me more about this?
How would you go about doing this?

Scoring Criteria

Each of the six sections is scored on a 4-point scale (1-4)

Section-1 : Diagnosis

	Scores
As Scores 2' AND/OR gives other information which is incorrect eg. it's not a mental illness, it's just his/her personality	1
Does not know the name of the diagnosis (ie, schizophrenia) and/or one or more answers to 1.4 incorrect according to criteria below.	2
Knows that the name of the problem/ diagnosis is schizophrenia and that schizophrenia is a 'severe' mental illness or at least not a minor problem i.e. In question1.4 (a) = No, 1. 4 (b) Yes or Don't know	3
As score 3 and spontaneously gives additional correct information e.g. names key symptoms, gives correct information regarding etiology.	4

Section 2: Symptomatology

	Scores
Below criteria for score '2'	1
Meets criteria for score '3' on all questions except 2.5 and /or 2.2 and / or gives 'Don't know' response to items in 2.1 and/or 2.3	2
2.1 At least 60% of symptoms which the relative referred to are attributed to the illness and none of the experiential symptoms (ie. Delusions, hallucinations, thought problems such as broadcast and echo) are attributed to the person's natural self. Necessary to meet criteria on question? 2.1 to 2.5	3

Include her talking to self and other descriptions of behaviors or beliefs, which would seem to be directly, associated with 'experiential symptoms' e.g. 'suspicious ideas'.

2.2 Aware of at least one of the experiential symptoms that the patient has experienced (acceptable to have mentioned one such in 2.1 or elsewhere in the interview.

.NB Broad definition of what might be included as an experiential symptom (see above) only applies this corresponds with recognition of the symptom in 2.5 e.g. the relative describes a symptom of talking to self in 2.2 or elsewhere and recognizes hallucinations in 2.5 as a common and important symptom.

2.3 The patient is unable to help control at least 60% of symptoms and the patient is unable to help control experiential symptoms.

2.4 'Correct' information elicited here (e.g. delusions, hallucinations, thought problems) would be taken into consideration for score of '4' but a response to 2.4 is unnecessary for score '3' 4

2.5 Replies 'Yes' to at least 2 of the symptoms

Meets criteria for score '3' and gives additional information which is relevant and correct e.g. in section 2.4.

Section 3: Etiology

Scores

Necessary to ask question 3.4…. and the response indicates that the relative will/may take action which may be detrimental to the patient e.g. relative believes cause is a vitamin deficiency and says will encourage patient to stop medication and take vitamin supplements instead, or relative believes cause is due to the patient having an unhappy childhood and believes best 'cure' is for the relative to 1

compensate by actions which may be over protective.

Acceptable response to questions 3.1 and 3.3 include biological or biochemical causes of mental illness. Stress or stressful life events or examples of such as stopping medication, hereditary factors etc.

2

Necessary to ask question 3.4…..but relative's response does not indicate that the relative will take action which may be potentially detrimental to the patient and of 'don't know' to question3.1 and 'don't know' or 'No' response to question 3.2 (a) and /or 'Yes' to (b) and/or (c).

Unnecessary to ask question 3.4…..and all answers to questions 3.2 correct (3.2 (a) = yes (b) = No (c) = Yes) AND any answer to question 3.1 and 3.3 within acceptable 'correct' criteria or response of 'don't know'. 3

Meets criteria for score of '3' and gives additional 'correct' information in Questions 3.1 or 3.3 or 3.2 (d) or elsewhere e.g. elaborates on biochemical theory. 4

Section 4: Medication

Scores

'Incorrect' responses to questions 4.5 and/or 4.6 (or elsewhere in the interview) or 'don't know' 1

Correct responses to question 4.5 and 4.6 (or elsewhere in the interview), 'incorrect' response(s) or 'don't know' to questions 4.1 and/or 4.3 and/or 4.4. 2

Acceptable responses to questions 4.1, 4.3, 4.4 and 4.5, correct responses to all of 4.6 (a) = No (b) = No (c) = No (d) = yes, (e) = No. Answers to questions 4.2 and 4.7 need not be known. 3

As '3' with additional 'correct' information given e.g. in response to 4.2 4

and /or 4.7 e.g. gives two common side effects.

Section 5: Course and Prognosis

	Scores
'Incorrect' or 'Don't know' response(s) to items 5.2 (c) or 5.2 (d) or any item in 5.3	1
Item 5.2 (c) = 'correct' (Yes) or 'don't know', item 5.2 (d) 'correct' (Yes) and all answers to 5.3 'correct' (a) = No. (b) = No. (c) = Yes, Other responses to items may be 'incorrect' or 'don't know'.	2
Questions 5.1 = 'yes' or possibly (an exception is made in the case of first episode patients, when a relative's response of 'don't know' would be acceptable) AND All answers to 5.2 correct (a) = Yes. (b) = Yes. (c) = Yes, (d) = Yes AND No 'incorrect' information in response to 5.2 (e) AND Question 5.3 all responses 'correct'	3
As for score '3' with additional 'correct' information e.g. in question 5.2 (e)	4

Section 6: Management

	Scores
Management strategies which potentially might be detrimental to the patient are mentioned in response to question 6.1 or 6.2 or the prompts in 6.3 or 6.4 or elsewhere in the interview AND the relative supplies some evidence that they might be carried out potentially detrimental would include here arguing and quarreling criticizing or emotionally over-involved behaviours	1
As score 1 above but relative supplies no evidence that the strategies will be acted upon	2

Acceptable responses to the prompt in 6.3 e.g.

(a) 'Yes' or No evidence that this is because relative wishes to avoid arguments over intrusive behaviour etc.

(b) 'No' or if 'Yes' evidence that the relative DOES NOT intend to be overprotective or to foster dependence. It is sometimes the case that for example, a spouse will feel it might be helpful to do more of the housework following their partner's discharge. This may be beneficial to the patient.

(c) 'No' or if 'Yes' evidence that the relative does not intend to spend an excessive amount of time with the patient. Each case needs to be assessed individually, but excessive might refer to relative giving up own interests to spend time with patient/relative fearing to go out and leave patient by him/herself. AND No 'potentially detrimental' management strategies (see earlier) mentioned in response to questions 6.1 and 6.2 (or elsewhere in interview) 3

As for score '3' AND 'potentially useful' strategies suggested in Section 6 or elsewhere in the interview. Such strategies might include e.g. recognition that quarrels and criticism are not helpful but that other strategies can help distracting patient, encouraging positive behaviours in patient, discussing problems etc NB required to suggest an alternative strategy to score 4. 4

Appendix VII: KASI- Tamil version

KNOWLEDGE ABOUT SCHIZOPHRENIA INTERVIEW (KASI)

Section 1 : Diagnosis

1.1 எத்தகையை பிரச்சனைக்காக நோயால் சிகிச்சை எடுத்துக் கொள்கிறார் என்று டாக்டர் உங்களிடம் கூறியுள்ளார்? .....

1.2 உங்களுக்கு இந்த நோயோட / பிரச்சனையோட பெயர் தெரியுமா? .....

1.3 எந்தவிதமான பிரச்சனைக்கு இவர் சிகிச்சை எடுத்துக் கொண்டு இருக்கிறார் என்று உங்களுக்கு தோன்றுகிறதா?.....

1.4 இந்த பிரச்சனை பற்றி நீங்கள் என்ன புரிந்துகொண்டீர்கள்/ நினைக்கிறீர்கள்? .....

a) இது ஒரு சிறிய நரம்பு சம்மந்தப்பட்ட பிரச்சனை என்று நினைக்கிறீர்களா? (ஆம் / இல்லை / தெரியவில்லை)

b) வாழ்க்கையில் பெரிதளவு பாதிப்பு ஏற்படுத்துகிற தீவிரமான மனநோய் என்று நினைக்கிறீர்களா? (ஆம் / இல்லை / தெரியவில்லை)

c) வேறு ஏதாவது? (ஆம் / இல்லை / தெரியவில்லை)

Section 2 : Symptomatology

2.1 நீங்கள் கூறிய அறிகுறிகள் இயற்கையானவையல்ல இல்லை நோயினால் உண்டானது என்று நினைக்கிறீர்களா?

	இயற்கையினால்	நோயினால்	தெரியவில்லை
a)			
b)			
c)			
d)			
e)			

2.2) வேறு ஏதாவது வழியாக அவர்கள் பாதிக்கப்படலாம் என்று நினைக்கிறீர்களா? ..... (எ.கா: யோசிப்பதில் பாதிப்பு)

2.3) அவருடைய அறிகுறிகளை அவரால் கட்டுப்படுத்த முடியும் என்று நினைக்கிறீர்களா?

	ஆம்	இல்லை	தெரியவில்லை
a)			
b)			
c)			
d)			
e)			

8

2.4) இந்த நோயால் பாதிக்கப்பட்டவர்களின் முக்கியமான /பொதுவான அறிகுறிகள் என்ன என்று நினைக்கிறீர்கள்? .....

2.5) இதில் எது முக்கியமான /பொதுவான அறிகுறிகள் என்று நினைக்கிறீர்கள்?

		ஆம்	இல்லை	தெரியவில்லை
a)	மற்றவர்களால் கேட்க, பார்க்க,மற்றும் நுகர முடியாதவற்றை பார்த்ததாகவும் கேட்பதாகவும் மற்றும் நுகர்வதாலும் உணர்தல்.			
b)	அசைக்க முடியாத மூடநம்பிக்கை			
c)	தன் எண்ணங்கள் தன்னை மீறி மற்றவர்களுக்கு தெரிந்து விடுகிறது என்றும் மேலும் மற்றவர்களின் எண்ணங்களை தன் மீது புகுவித்துவிடுகின்றன என்று கூறுகிறார்.			

Section 3 Etiology

3.1 இந்த மன நோயின் காரணம் என்ன என்று நினைக்கிறீர்கள்? .....

3.2 இதில் ஏதாவது ஒன்று காரணமாக இருக்கும் என்று நினைக்கிறீர்களா?

		ஆம்	இல்லை	தெரியவில்லை
a)	மூளை வேலை செய்வதில் பாதிப்பு என்று நினைக்கிறீர்களா?			
b)	வளர்ப்பு முறையினால் என்று நினைக்கிறீர்களா?			
c)	பரம்பரை காரணம் என்று நினைக்கிறீர்களா?			
d)	வேறு ஏதாவது காரணங்கள்?			

3.3 நீங்கள் கூறிய காரணங்களில் எது முக்கியமான காரணம் என்று நினைக்கிறீர்கள்? .....

3.4 இப்பகுதியில் கொடுக்கப்பட்ட வினாக்களுக்கு சரிவர விடைகள் உறவினரிடமிருந்து கிடைக்கவில்லை என்றபட்சத்தில் பின்வரும் கேள்வியை கேட்க வேண்டும்.
உங்களுடைய எண்ணத்தின்படி இந்த ....., ... காரணத்தினால் வந்திருக்காலம் என்று நினைக்கிறீர்களா? அதற்கு என்ன தீர்வு அல்லது உதவி செய்ய முடியும் என்று நினைக்கிறீர்களா?

Section 4 : Medication

4.1 டாக்டர் உங்களுக்கு மாத்திரை/ஊசி எழுதி கொடுத்துள்ளாரா?
ஆம்/ இல்லை/ தெரியவில்லை.
மாத்திரை / ஊசி/ எது என்று தெரியவில்லை.

4.2 மாத்திரை / ஊசியின் பெயர் என்ன? .....

4.3 ஒரு நாளில் எத்தனை வேலை மாத்திரை எடுத்துக்கொள்கிறார்? .....

4.4 எங்கிருந்து அவர் மாத்திரைகள் பெற்றுக்கொள்கிறார்? .....

4.5 எவ்வளவு நாள் இந்த மாத்திரைகளை எடுத்துக்கொள்ளவேண்டும்?
(சில வாரங்கள்/ சில மாதங்கள்/ ஒருவருடம்/ இரண்டு வருடம் / இரண்டு வருடங்களுக்கு மேல்)

4.6 இந்த மாத்திரை / ஊசியை எவ்வாறு எடுக்க வேண்டும் என்று நீங்கள் நினைக்கிறீர்கள்?

	ஆம்	இல்லை	தெரியவில்லை
a) எப்பொழுது தேவை என்று நினைக்கிறீர்களோ அப்போழுது எடுக்கலாம்			
b) அவர்கள் குணமாகும் வரை எடுக்க வேண்டுமா?			
c) இவருக்கு மாத்திரை தேவை என்று நீங்களோ அல்லது மற்றவரோ நினைக்கிறீர்களா?			
d) மருத்துவர் கூறியபடி எடுத்துக் கொள்ளலாம் என்று நினைக்கிறீர்களா?			
e) அவசியம் இல்லை?			

4.7 இந்த மாத்திரை சாப்பிடுவதால் என்ன பக்கவிளைவுகள் வரும் என்று நினைக்கிறீர்கள்?
.....

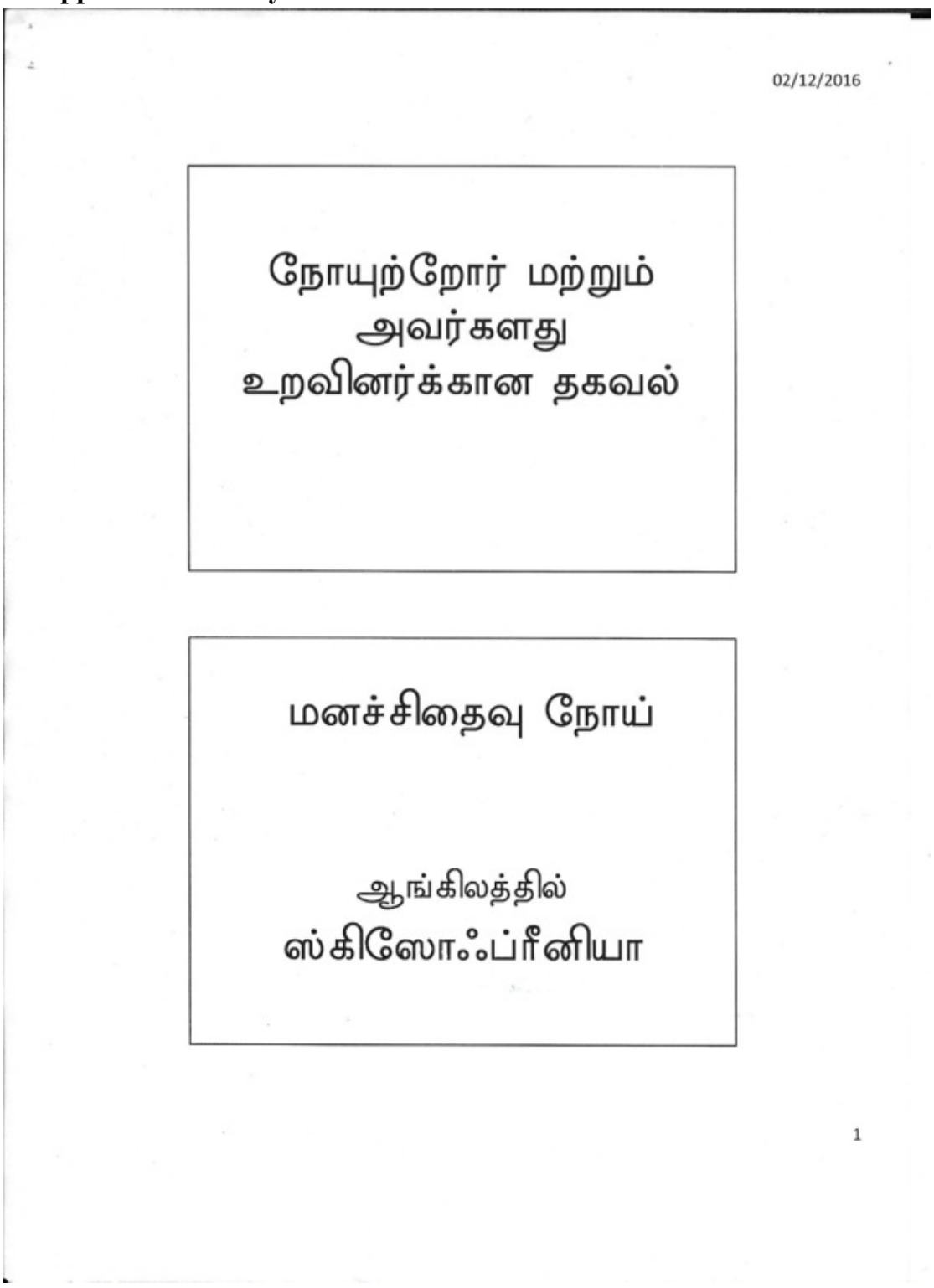
Section 5 Course and prognosis

5.1 இந்த பிரச்சினை திரும்ப வரும் என்று நினைக்கிறீர்களா (ஆம்/ இல்லை/தெரியவில்லை)

5.2 எந்த காரணத்தால் இந்த பிரச்சனைகள் திரும்ப வரும் என்று நினைக்கிறீர்கள்?

	ஆம்	இல்லை	தெரியவில்லை
a. அவர்கள் சும்மா இருந்தால்			
b. வாழ்க்கையில் நிறைய பிரச்சினை இருந்தால்			

Appendix VIII: Psychoeducation module- Tamil version



02/12/2016

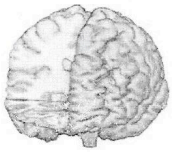
நோயுற்றோர் மற்றும்
அவர்களது
உறவினர்க்கான தகவல்

மனச்சிதைவு நோய்

ஆங்கிலத்தில்
ஸ்கிஸோஃப்ரீனியா

1

ஸ்கிஸோஃப்ரீனியா என்றால் என்ன?



ஸ்கிஸோஃப்ரீனியா
மூளை பாதிப்பினால் ஏற்படும் ஒரு மனவியாதி

ஸ்கிஸோஃப்ரீனியாவின் அறிகுறிகள் யாவை?

- நேர்மறை அறிகுறிகள்
- எதிர்மறை அறிகுறிகள்

நேர்மறை அறிகுறிகள் என்றால் என்ன?

- மாறான தவறான நம்பிக்கை (டெல்யூஷன்) – சந்தேக புத்தி
- இல்லாத பேச்சு குரல் கேட்டல்
- இல்லாத பொருட்களை பார்த்தல்
- அசாதாரண பயம்
- தூக்கமின்மை
- பசியின்மை
- அசாதாரண நடவடிக்கைகள்

அசாதாரண நடவடிக்கைகள் என்றால் என்ன?

- தானாக பேசுவது ,சிரிப்பது
- சுற்றிதிரிவது
- ஒரே இடத்தில் அசையாமல் இருப்பது
- ஆடை குறைபாடு
- சுத்தமின்மை
- உறவினர்களுடம் சண்டைப் போடுவது
- தாறுமாறாக பேசுவது
- கோபப்படுவது
- அடிப்பது
- சந்தோஷம் மற்றும் துக்கம் காரணம் இல்லாமல் வருவது
- தற்கொலை எண்ணங்கள் மற்றும் முயற்சிகள்

எதிர்மறை அறிகுறிகள்

- சக்தியின்றி இருத்தல்
- கவனக் குறைவு
- வேலை செய்வதற்கான ஆர்வம் இல்லாமை
- வேலையில் ஈடுபாடு குறைந்துவிடும்
- மற்றவர்களுடன் கலகலப்பாக பழகுவது குறைந்துவிடும்
- ஏதிர்காலத்தை பற்றிய எண்ணங்கள் குறைந்துவிடும்

ஸ்கிஸோஃப்ரீனியா பற்றிய தவறான கருத்து என்ன?

இல்லை
இது ஒரு மனநோய்

ஸ்கிஸோஃப்ரீனியா பரவக்கூடியதா? உயிர்க்கு ஆபத்தானதா?

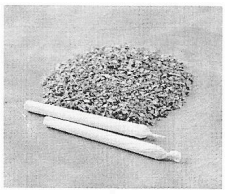
இல்லை

- ஸ்கிஸோஃப்ரீனியா எனப்படும் மனவியாதி பரவக்கூடிய வியாதி அல்ல தானாக ஏற்படக்கூடிய ஒரு வியாதி.
- ஸ்கிஸோஃப்ரீனியா உயிர்க்கு ஆபத்தான வியாதி அல்ல.

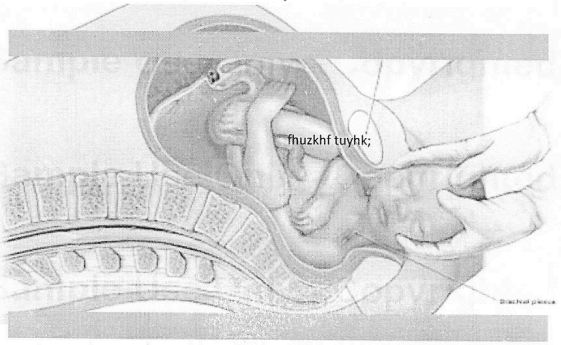
ஸ்கிஸோஃப்ரீனியா ஏன் ஏற்படுகிறது?

இந்த வியாதிக்கான காரணங்கள் தெளிவாக தெரியவில்லை.

அன்றியும் இவை
கஞ்சா மற்றும் மது பழக்கத்தின் காரணமாக இந்த வியாதி
ஏற்படலாம்



பிறப்பின் போது ஏற்படும் மூளை பாதிப்பின்
காரணமாகவும் வரலாம்



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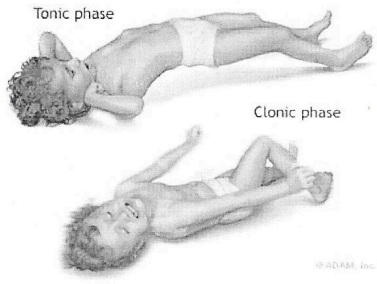
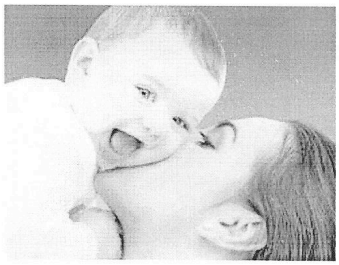
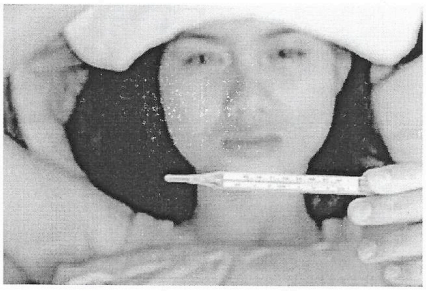
வலிப்பு நோய் ஒரு காரணமாகலாம்



பரம்பரை மரபு அணுக்கள் மூலமாக தொடரலாம்



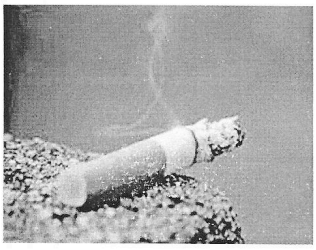
வைரஸ் மூளை காச்சல் ஒரு காரணம் ஆகலாம்



மன அழுத்தத்தினால் அதிகரிக்கிறது

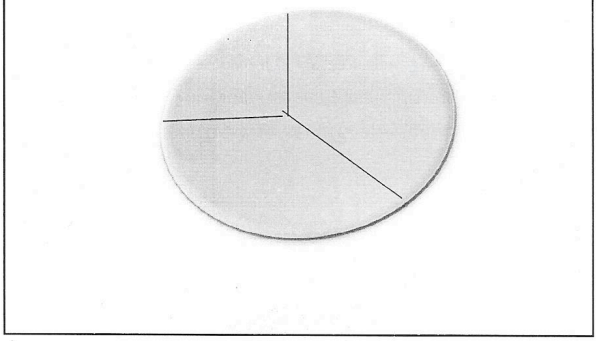
குழப்பமான சூழ்நிலை காரணமாக அதிகரிக்கிறது

புகை பழக்கத்தினால் அதிகரிக்கிறது



ஸ்கிஸோஃப்ரீனியா எந்த அளவிற்கு குணம் அடையலாம்?

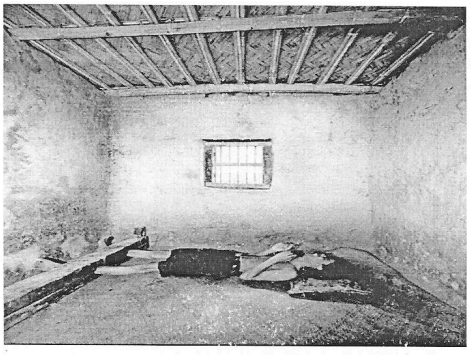
*ஸ்கிஸோஃப்ரீனியாவை கட்டு படுத்த முடியும்.
*ஸ்கிஸோஃப்ரீனியாவை பூரணமாக குணப்படுத்த முடியாது.
*தகுந்த மருந்துகளையும்,சிகிச்சைகளையும், பெறவேண்டும்.
*ஸ்கிஸோஃப்ரீனியா உடைய 1/3 பேர் நன்றாக வேலை செய்து திருமணம் புரிந்து இயல்பு வாழ்க்கை வாழ்கின்றனர்.



இந்த வியாதிக்கான சிகிச்சைகள் என்ன?

- சிகிச்சை உடனே தொடங்கினால் மிகுந்த பல அறிகுறிகளைக் குறைத்து விடலாம்
- மருந்துகள் மூளையில் உள்ள டோபமைன் எனப்படும் வேதியபொருளுடன் செயல்புரிகின்றன.
- மனநோய் மாத்திரைகள் சாப்பிடுவதினால் கைகால் நடுக்கம், பதட்டம்நிலை, கைகால் இறுக்கம் மற்றும் உடலுறவு பிரச்சனைகள் போன்ற பக்க விளைவுகள் ஏற்படலாம்
- இந்த பக்க விளைவுகளை மாற்று மருந்துகள் சாப்பிடுவதின் மூலம் தடுக்கலாம்
- வேலைவாய்ப்பு முக்கியம்.
- வாழ்நாள் நீடிக்கும் வரை சிகிச்சை எடுக்க வேண்டும்.

மருத்துவ வசதி குறைவாக இருந்த போது நோ்யாளின் நிலை இவ்வாறு இருந்தது



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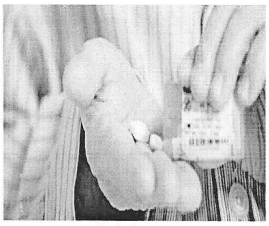
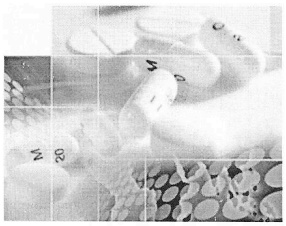
குணப்படுத்துவது எப்படி?

சிகிச்சை அளிக்க பயன்படுத்தும் மருந்துகள் நல்ல பலனை தருகின்றன





சிகிச்சை எடுத்துக்கெள்ளாவிட்டால் என்ன ஆகும்?

- அவரது குடும்பத்திற்கு பெரும் துயரத்தை தரும்
- தற்கொலை செய்து கொள்வதற்கான ஆபாயம் அதிகம்
- நீண்டகாலம் சிகிச்சையின்றி இருக்குமெனில் நோயை கட்டுப்படுத்துவது கடினமாகும்.
- எவ்வளவு சீக்கிரமாக இதனை கண்டுபிடித்து சிகிச்சை அளிக்கிறோமோ அவ்வளவு நல்லது.

எடுத்து கொண்டிருக்கும் சிகிச்சையை நிறுத்தினால் என்ன ஆகும்

- எச்சரிக்கை! நேர்மறை அறிகுறிகள் மற்றும் எதிர்மறை அறிகுறிகள் திரும்ப வரும்.
- முன்பு எடுத்துக்கொண்டிருந்த மாத்திரைகள் திரும்பவும் பலன் தராமல் போகலாம்.
- நோயின் பாதிப்பு அதிகமாகலாம்.

நாம் என்ன செய்ய வேண்டும்?

- ஸ்கிஸோஃப்ரீனியா பற்றிய தகவல்களை அறிந்துகொள்ள வேண்டும்.
- மருத்துவரால் கொடுக்கபடும் மாத்திரைகளை தவறாமல் எடுக்க வேண்டும்.
- தவறாமல் மருத்துவரை காணவேண்டும்
- சிகிச்சை பற்றிய முடிவுகள் உங்கள் மருத்துவர் கையில் ஒப்படைக்க வேண்டும்.

உதவியாளர்கள் செய்ய வேண்டியது என்ன?

- அவர்களை மருத்துவமனைக்கு கொண்டு செல்வது.
- மாத்திரை எடுத்து கொடுப்பது
- அவர்களது உணவு மற்றும் ஆடை போன்றவற்றை கவனித்து கொள்வது
- அவர்கள் செய்ய வேண்டிய வேலைகளை எடுத்து சொல்வது
- அவர்களை கிண்டல் மற்றும் கேலி செய்வதை தவிர்க்க வேண்டும்
- அவர்களை திட்டுவதை தவிர்க்க வேண்டும்
- அவர்களிடம் உங்கள் எதிர்பார்ப்பை குறைத்துக்கொள்ள வேண்டும்

எவ்வாறு இயல்பு வாழ்க்கைக்கு திரும்புவது?

மருத்துவரின் ஆலோசையின்படி சிகிச்சையை கடைபிடித்தப்பின்,
நேர்மறை அறிகுறிகள் கட்டுபாட்டிற்குள் வந்தபின்னும், சில எதிர்மறை அறிகுறிக்ள தென்படலாம்.

அதாவது

- அவகள் அன்றாட வேலைகளைக் கவனிப்பது கடினமாகலாம்.
- சிலர் வேலைகளை தானே கவனித்துக் கொள்ளும் இயல்பை இழந்து விடுவர்.
- இவற்றால் குளித்தல், துணிதுவைத்தல், கடைக்கு சென்று பொருட்களை வாங்குதல், தொலைபேசியில் பேசுதல் போன்ற வழக்கமான வேலைகள் கூட கடினமாக தோன்றலாம்.
- இந்த பிரச்சனைகளை மறுவாழ்வு பயிற்சிகள் மூலம் சமாளிக்கலாம்.
- நோயை பற்றியும், அதற்கான சிகிச்சையை பற்றியும்,

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ஸ்கிஸோஃப்ரீனியாவை உடையவர்கள் திருமணம் செய்துக்கொள்ள முடியுமா?

- இவர்களுக்கு திருமணம் ஒரு தடை அல்ல.
- திருமணமத்திற்கு முன் நோய் இருப்பதை பற்றி தெரிவிக்க வேண்டும்.
- தெரிவிக்காமல் திருமணம் செய்வது ஒரு சட்டப்பூர்வமாக தவறு.
- விவாகரத்துக்கு ஒரு உரிய காரணம் ஸ்கிஸோஃப்ரீனியா.
- இந்த நோயை உடைய சிலர் திருமண வாழ்க்கைக்கு ஈடு கொடுக்க முடியாமல் போகலாம்.

(மருத்துவரின் ஆலோசையின்படி சிகிச்சையை கடைபிடித்தப்பின்,நேர்மறை அறிகுறிகள் கட்டுபாட்டிற்குள் வந்தபின்னும், சில எதிர்மறை அறிகுறிகள தென்படலாம்.)

உதவியாளர்களுக்கு ஒரு அறிவிப்பு

- ஸ்கிஸோஃப்ரீனியா நோய் உடையவர்களை கவனித்துக் கொள்ளுவது கடினம்.
- அதே சமையம் உங்கள் நலனும் அவசியம்.
- உங்கள் உடலை கவனித்துக் கொள்ளுங்கள்.
- நன்றாக சாப்பிடவும்.
- அவர்களை கவனித்துக்கொள்ள மற்ற உறவினருடைய உதவியை நாடுங்கள்.
- நல்ல காரியத்தில் கலந்துக்கொள்ளும் போது இவர்களை பற்றி கவலைப்படாதீர்கள்.
- சந்தோஷபடுத்தும் காரியங்களில் உங்களை ஈடுபடித்திக்கொள்ளுங்கள்.

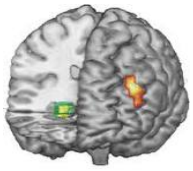
02/12/2016

நன்றி

Appendix IX: Psychoeducation module- English version

Information regarding Schizophrenia for patients and caretakers

What is Schizophrenia?



Schizophrenia is caused due to insult to the brain

Symptoms

- Positive
- Negative
- Mood
- Cognitive

Positive symptoms

- Unshakeable Wrong beliefs/ delusions/ suspiciousness
- Auditory Hallucinations
- Visual Hallucinations
- Irrational beliefs
- Sleeplessness
- Loss of appetite
- **Abnormal behavior**

Abnormal behavior

- Talking to self
- Smiling to Self
- Wandering
- Same posture for long duration (Catatonia)
- Disrobing and poor modesty
- Poor hygiene
- Getting provoked for no reason
- Mood fluctuations for no reason
- Irrelevant speech/answering
- Anger
- Assaultive behavior
- Suicidal ideation

Negative symptoms

- Poor concentration in tasks
- Poor attention
- Weakness to do any work
- Decreased interest in activities
- Poor socialization
- Decreased interest in future

Is Schizophrenia INFECTIOUS OR FATAL?

NO

- **Schizophrenia affects on it's own**
- **Schizophrenia is not dangerous to life**

Misconceptions about Schizophrenia

NO

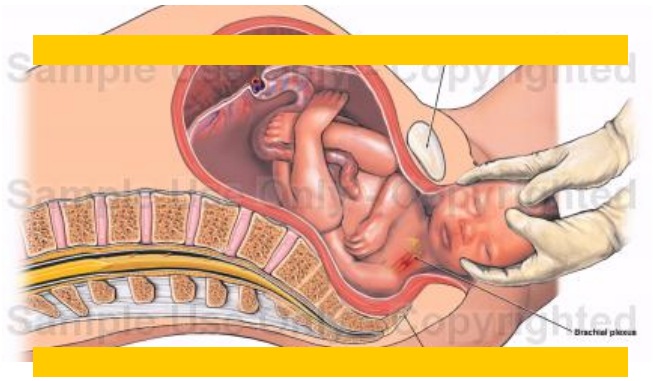
This is a mental illness

Why does Schizophrenia occur?

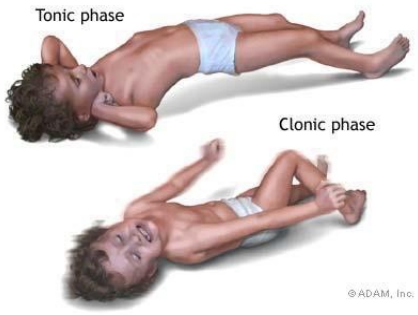
No definite cause is known

But
Ganja use and alcohol use can precipitate Schizophrenia

Schizophrenia can occur due to insult during birth



Seizures can also be a cause



Passes through **genetic vulnerability/ transmission**

Brain fever caused by Viruses

Stress can also worsen Schizophrenia

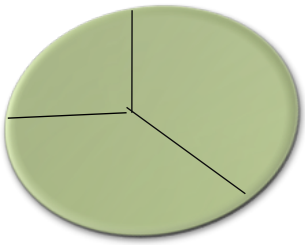
Familial stressors can also worsen

Cigarette/Nicotine use also can worsen

What is the prognosis of Schizophrenia?

- Schizophrenia can only be **controlled** but
- Schizophrenia **cannot be cured**.
- Adequate medication is necessary
- 1/3rd of the patients with Schizophrenia function well, get married and lead a normal life.

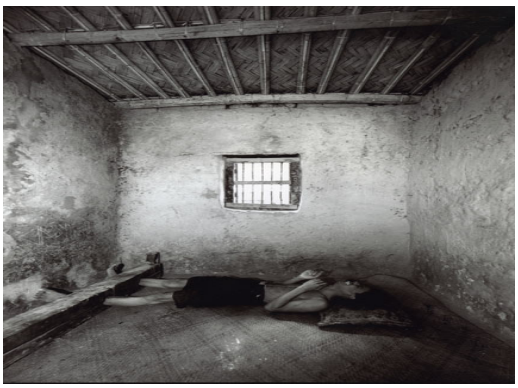
- 1/3rd



What is the treatment of Schizophrenia ?

- If detected early, we can reduce the severity quickly.
- Psychiatric medications work on Dopamine in the brain.
- By taking these medications, side effects such as tremors of the limbs, anxiety, tightness of the limbs, and sexual problems can occur.
- These side effects can be controlled with the help of other medications [THP].
- Is it very important keep oneself occupied even during treatment.
- Life- long treatment must be taken.

Before medicines were invented, this was the state of patients with Schizophrenia.



Is there medication for Schizophrenia?

NOW, there are several medicines available that give good results

What happens if Schizophrenia is not treated?

- The family suffers.
- Patient may not hesitate to kill him/her self
- If not treated for long duration, it is very difficult to control Schizophrenia
- It is better if Schizophrenia is detected early and treated appropriately.

What happens if the treatment is stopped?

- BE CAREFUL!
- Positive and negative symptoms will reoccur
- The same medicines may not be effective again
- Schizophrenia will worsen

What should the caretakers do?

•They should know as much information about Schizophrenia as possible
•Medicines given by doctors have to be given regularly
•They must visit the doctor regularly
•They should not decide about the treatment themselves and should leave the decision about treatment to the doctor.

What should the caretakers do?

- Bring patients to review at hospital regularly
- Supervise medication
- Help with diet and clothing
- Prompt them regarding activities
- Do not make fun of them
- Do not scold them
- Decrease expectations from them.

How far will they be back to normal life?

Even after taking treatment as per doctors advise, after positive symptoms are controlled, some negative symptoms may persist.

THAT MEANS

- Their daily activities will be difficult for them
- They cannot do some routine activities by themselves
- Bathing, washing clothes, shopping, answering calls are difficult for them
- These problems can be managed with the help of rehabilitation.

Can patients with Schizophrenia marry?

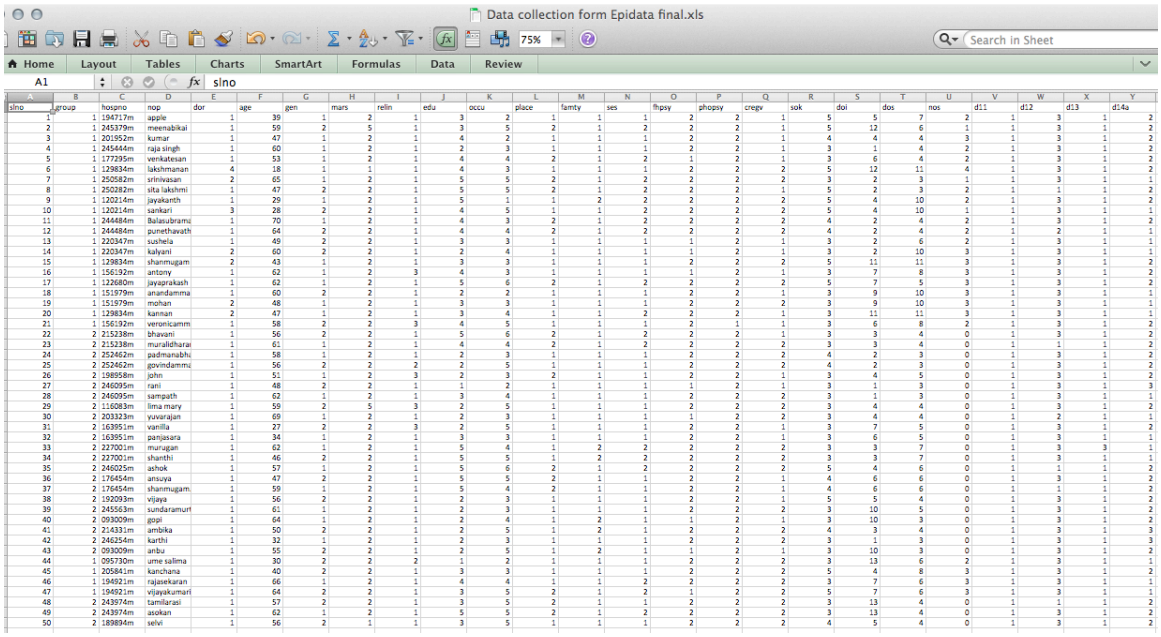
- They are not prohibited from marrying
- They have to disclose regarding the illness before marriage
- Marrying without disclosure is an offence by law.
- Schizophrenia can be a ground for divorce
- People with Schizophrenia will be unable to cope with married life because even after treatment, even after taking treatment as per doctors advise, after positive symptoms are controlled, some negative symptoms may persist.

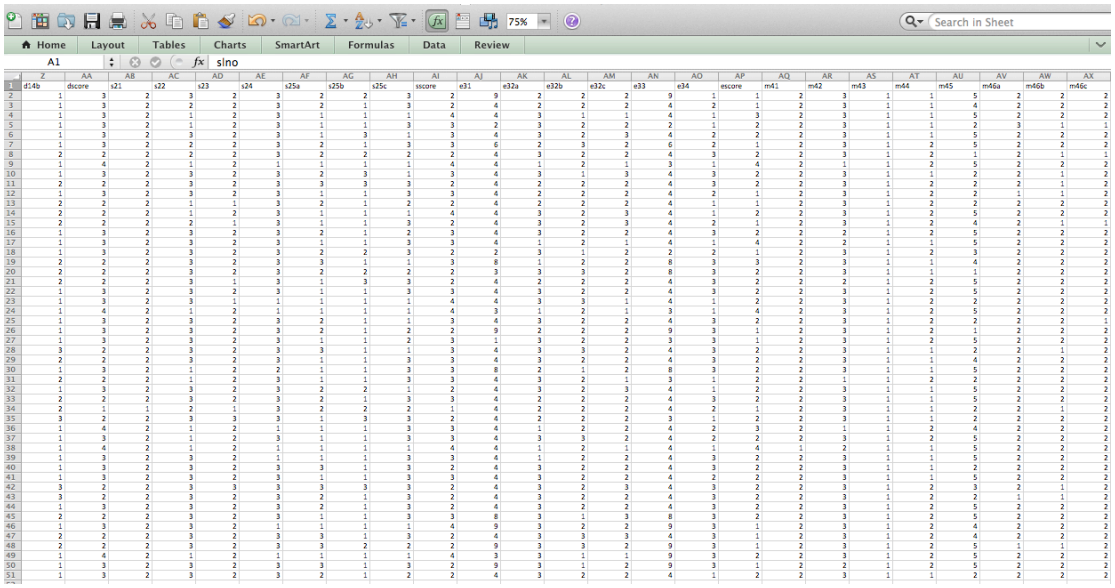
Information for the caretakers

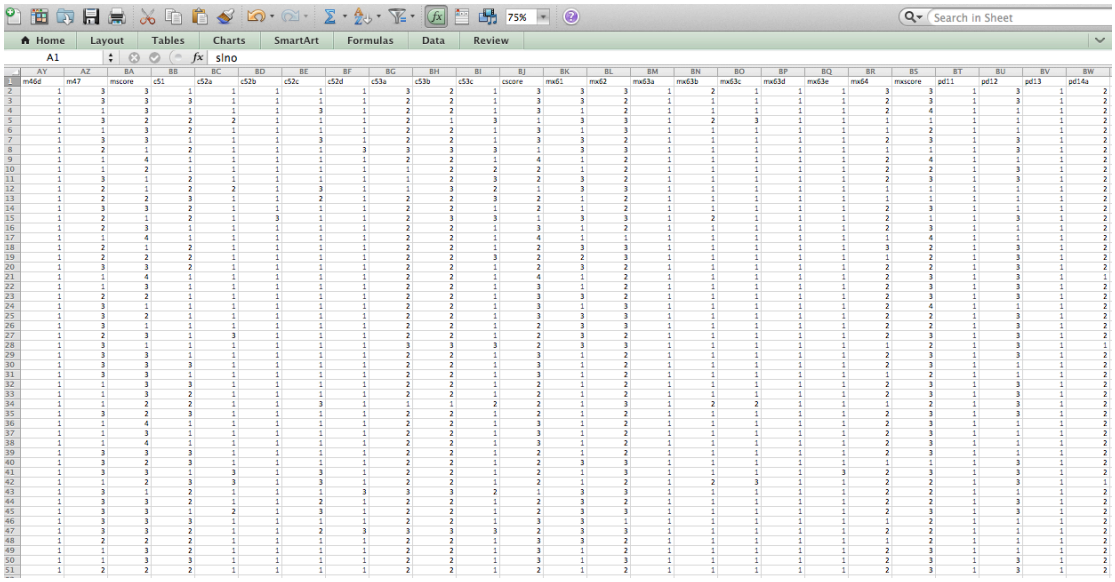
• It is difficult to manage patients with Schizophrenia.
• At the same time, your health is also very important.
• You should take care of your health as well.
• Eat well
• Make sure you take shifts for responsibilities with the help of other relatives
• Don't feel guilty and attend gatherings for yourself
• Indulge in activities that make you happy as well.

Thank you

Appendix X: Excel data from Epidata



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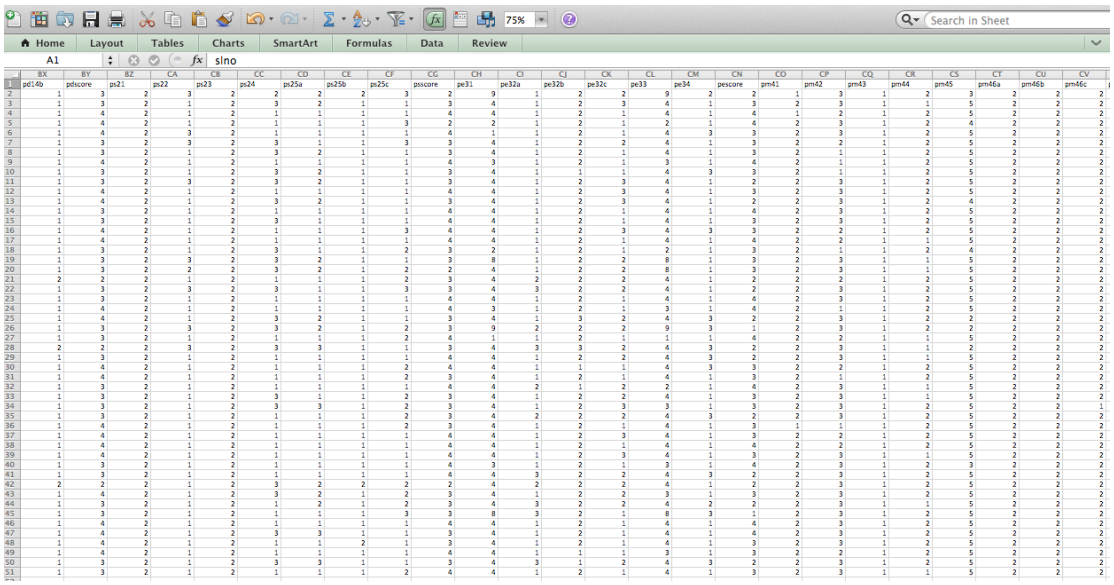
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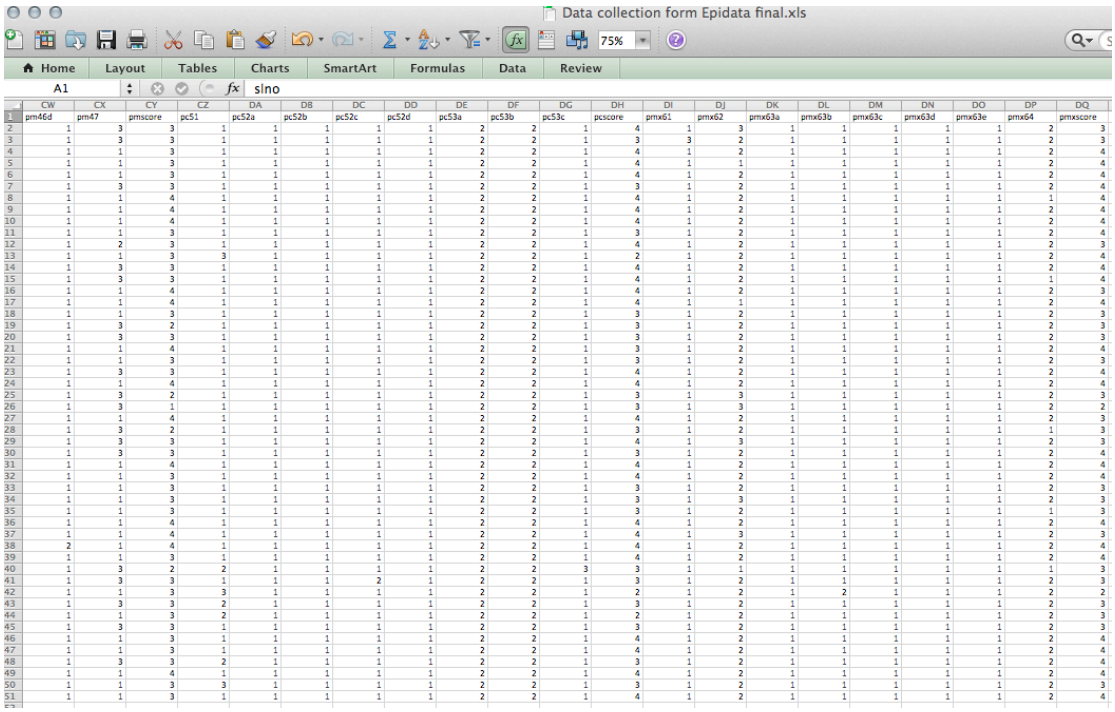

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